California State Journal of Medicine.

Published Monthly by the Medical Society of the State of California

PUBLICATION COMMITTEE

PHILIP MILLS JONES, M. D., Chairman and Editor
GEORGE H. EVANS, M. D.
G. F. REINHARDT, M. D.
C. D. McGETTIGAN. M. D.
HARRY M. SHERMAN, M. D.

JOHN J. HARRISON

Business Manager

Members of the Society are requested to promptly notify the publication office of change of address, in order that mailing list may be corrected. Secretaries of County Societies are also requested to notify the "Journal" of deaths, removals, etc., and send in names of new members and their postofice address.

Communications on subjects of interest to the profession are invited. The "Journal" is not responsible for the views advanced by correspondents. Address letters relating to the "Journal" to the publication office, 31 Post Street, San Francisco.

FEBRUARY, 1904.

EDITORIAL NOTES.

A principle of right vs. money; that is exactly the question which the Publication Committee

PRINCIPLES OF ETHICS.

and the Board of Trustees have had to face. We started your JOURNAL with the plainly expressed policy to adhere to the letter of the ethical

law in the advertising published in the JOURNAL. The "Principles of Medical Ethics" adopted by the American Medical Association and by this Society, Chapter I, Article 1, Section 8 (page 191 of the Register), says: "It is equally derogatory to professional character for physicians . . . to dispense or promote the use of secret medicines."

That reads pretty clear and it does not seem possible that anyone could misunderstand it. A medicine is defined as a drug or a therapeutic application; broadly, anything used in the treatment of disease. Secret, is unknown. A secret medicine, then, is one the composition of which is unknown, and the ethical principles which our Society and Association have promulgated distinctly state that such secret medicines cannot be used or employed by physicians without violating the right. The question which every physician should be able to answer, if asked to do so, is not, "What is the name of the thing you are giving your patient?" but "What are you giving your patient, and in what amount?" Do you not see the difference? There are hosts of things made for and used by the profession, unfortunately, the ingredients of which the physician does not know. If asked, he could only answer, "Brown's Petaluma Tonic," or "Black's Antiedema Paste," or "Anti-this-orthat." He would not be able to state what he was really giving his patient. Suppose the manufacturer says the mixture contains iron, arsenic

and strychnin. Does that give you any information? Comparatively speaking, no. For you do not know how much iron, arsenic or strychnin the patient takes to a dose. You would still be using a secret medicine.

Note the language of the principle of ethics quoted: "To dispense or promote the use of secret

ADVERTISING.

medicines." That is the phrase which brings the matter home to the Publication Committee, to the Trustees and to the House of

Delegates. If we allow advertisers to present to the attention of our members and readers statements relative to "secret medicines," are we not guilty of a violation of this ethical principle? Are we not aiding in "promoting the use of" these things? It is of no avail to reply that somebody else, or some other journal does these things. It would be as sensible to defend the practice of murder or of rape by alleging that other people do them. Nor can it properly be urged that we need money to make a business success; one might as well support the practice of bank robbery or the profession of highwaymanship. It is a plain and simple question of right and wrong and admits of no compromise; certain things are either right, or they are wrong-which shall we choose? If the principle stated be true, and it is wrong to "promote the use of secret medicines," then such medicines cannot be recommended without stultifying ourselves, and to publish advertising matter relating to them is practically and tacitly recommending them. That was the position which the editor took when he started the JOURNAL; that position was endorsed by the Publication Consmittee when it took active supervision of the JOURNAL; it is the position which has again been emphasized by the Publication Committee, and unanimously endorsed by the Board of Trustees. Several perplexing questions came to the editor's attention, and they were put on file waiting for the decision of the committee and the Trustees. The committee has met and has decided; the Trustees have met and have passed a resolution sustaining the committee and recommending it to continue the original policy of publishing only such advertising statements as literally conform, within a reasonable interpretation, with the letter of the principle involved.

Why is all this such an important question that it involved a meeting of the committee and of the Trustees, and has taken up so much

RIGHT OR space? Let us see for a moment what it means. In coming to the

decision to stick to the right thing, we have wiped out, by writing one of the shortest words in the English language—yet a word that has been said to be the hardest word to say-NO, something like \$800 worth of contracts that were on the desk waiting to be OKed, and cut off a thousand dollars of almost certain prospective income. That is about what it cost us to say that little NO, and to adhere to a principle which our Society and our Association have declared is a right principle. The issue is plain and clear and cannot be avoided. We may just as well make the decision now as to put it off; the Publication Committee certainly will not bury its head in the sand and refuse to see what confronts it. Right is right and wrong is wrong, and a few dirty dollars do not make a wrong come any nearer being a right—though they are commonly accepted as a good excuse. What position will you, as a member of a society that has formulated and promulgated this document, embodying those principles which are declared to be right, just, decent and ethical, take in this matter? Don't shirk the issue; don't try to put it on someone else; you must face it sooner or later, so we put it to you now. Will you stand for the right and a possible deficit which you will have to provide means for meeting-for it costs money to publish the sort of Journal you are getting-or will you choose to take the dollars and ignore the principle you have subscribed to-to be bought outrightto be subsidized-to depart from that which you have, in theory, declared to be right?

Some advertisements, almost universally regarded as "good business," came into the office and, pending a final decision of the WHAT CAN question, were accepted and pub-BE DONE? lished. They were not approved by the Publication Committee, for there was no opportunity of getting a definite decision on so momentous a question without careful study. But that is in the past. Now what can we do in the future? Must this action deprive the JOURNAL of the possibility of eventually getting upon a self-supporting basis? Some of us have given a good deal of careful thought to the matter, and we believe that such is not the case. We have enough faith in those manufacturers who are doing a perfectly straight business to believe that they will come to see this as we see it, and to realize the advantage to themselves of being in such good clean company. It remains for time and hard work to demonstrate whether this conclusion is justified. Certainly it will take longer to reach the goal, but we firmly believe it will be reached, and that you will find in the end that honesty of purpose in this matter will pay, as truly as every good business man has found that honesty in business pays.

What, exactly, is a "secret medicine"? That is the crux of the whole matter. There are, or may be, several definitions of the A SECRET term. The actual definition has been

MEDICINE. formulated by a national pharmaceutical organization of a foreign country. and has been accepted and adopted by the American Pharmaceutical Association, and by it recommended to the A. M. A. According to this definition, a medicine is secret if everything about itingredients, working formula, method of preparation and all processes-are not known and published. In theory this is entirely correct. But practical conditions are such as to make it impossible to enforce such a definition. Large amounts of capital have been invested in honest pharmaceutical manufacturing business, and this capital should be protected from dishonest competition. Consequently, until there may be devised some way for securing protection not only to this capital, but also the public and to the patient, it would not be right to insist upon the disclosure of these working methods. We can, however, insist that the manufacturer give a truthful statement of the actual amount of the active ingredients in the finished product of that which he wishes to advertise. This is the working definition which we have placed upon the term "secret medicine." If at any time an advertisement appears in the JOURNAL in which the advertiser publishes a formula that can be shown to be untruthful, such advertisement will be dropped upon the demonstration of that fact. In this whole contention we do not intend to criticise other journals. They may not appreciate the facts of the case, or they may be under the control of men who do not care for anything but money. It is not our place to judge. But we have decided to do the right

Some replies from advertisers have been received since the Publication Committee took the action which we have just discussed. One firm writes: "In sending you copy UTTER RUIN? for advertisement . . . we wish to compliment you, and will say we cheerfully go into the JOURNAL to encourage the worthy work undertaken." "It is to be regretted that so few medical journals are on such a plane. Another, in sending in the formula to accompany the advertisement, writes: "In this connection we beg to state that if the rule made by the Society in regard to advertising be strictly carried out, the same will make the advertising space taken by our company of decidedly more value to us." So you see, perhaps the action of the Committee, in supporting the editor's policy, may not lead to utter ruin, after all! It may, in the end, pay to be decent as well as it pays to be honest.

as we see it, and we hope you will all approve.

In the sworn affidavit accompanying a candidate's application it is expressly stated that "at the time of granting the diploma

ENFORCEMENT the requirements of the medical OF THE LAW. school were in no particular less than those prescribed by the Association of American Medical Colleges for that year; and that the applicant complied with all the requirements of said school." It now appears from evidence obtained by the Board of Examiners that two local medical schools recently granted diplomas to matriculants after two years' attendance. In this year's announcement of one of these schools (a regular college) may be found the name of an illegal practitioner who, after one single course, was graduated with full honor. Hence the absolute necessity, on the part of the Board of Examiners, to exact other credentials than a diploma. For this purpose a committee has been appointed to investigate and report on the credentials of all applicants for license. It may be safely predicted that the strict enforcement of that portion of the Medical Act relating to the standard of medical colleges will cause the rejection of several apparently satisfactory credentials and delay the issuance of license to those

who through false statements have succeeded in

taking the examinations.

It has often been said that the modern surgeon has no nerves, but has a great deal of nerve; this may be largely true. At any rate, INTERNIST: there is a good deal of collateral A NEW ONE. evidence to substantiate a claim to nerve, and not the least of this evidence is to be found in the treatment of English. "Surgical English" is a painfully maimed and deformed freak, carved into grotesque abominations by the nervy (or nerveless) surgeon, and further distorted into ungainly shape by the brazen addition of illegitimate Germanic forms. The passion to mutilate is contagious, too, and the physician -the family doctor-has shown the primary lesions. Surgeons were not content with the simple mutilation of such portions of the King's English as came within their technical domain; they were not content to "operate a case" or to note that a "case died," or got well, and such like absurdities; they must needs impart their painful craving to the physician. At first they were content to observe the growing use, by physicians, of their bastardized German expression "saw a case," the "temperature of the case," etc. But now they have handed one to the physician that is a littlejust a little-too much for patience to endure. They have branded him an "internist"-whatever that anomaly may be and he does not seem to object! A surgeon is "one who practices surgery," and a physician is "one who practices medicine." Then what in the world, the flesh or the devil, is an "internist"? A physician, who had thus been publicly branded, was asked what it meant; he replied that "it is German." That may appear to some to look like a definition; but is it? Please, please, what is an internist?

SAN FRANCISCO BOARD OF HEALTH.

The interest of the people of San Francisco has been stirred by the action of the present Mayor, E. E. Schmitz, in his appointments of new members of the Board of Health to take the places of Drs. V. P. Buckley and R. W. Baum, whose terms of office have expired, and Dr. W. B. Lewitt, who has resigned from office. In the places of the two former gentlemen, Mayor Schmitz appointed Dr. W. A. Harvey and Dr. J. A. Hughes, and in the place of Dr. Lewitt he appointed Dr. J. F. Poheim. These new appointees, with Dr. James W. Ward and Dr. John C. Stinson, Mayor Schmitz's appointees of last year, are the medical members of the present Board of Health.

Dr. James W. Ward is a graduate of the Homeopathic Medical College of New York, 1883. He has been in San Francisco since 1886 in the active practice of homeopathy. Dr. John C. Stinson is a graduate of Trinity Medical College, Toronto, Canada, 1893. He has been practicing medicine in San Francisco since that date. Dr. W. A. Harvey graduated from the College of Physicians and Surgeons, St. Louis, in 1895, and was licensed to practice in California in 1901. Dr. J. A. Hughes took his degree from the University of California, Medical Department, in 1883, and received his certificate in the same year. Dr. Joseph A. Poheim graduated at Cooper Medical College about seven years ago; he has spent most of this time abroad, having returned to San Francisco but recently.

These facts are cited because they give some inkling to the general body of the profession, who may not know any of these men personally, of what will be the value of the new appointees as sanitarians and as practitioners of civic hygiene. The interest of the medical man here is identical with that of the non-medical man. He wants to be sure that the men in authority, and who only can do certain acts legally, are wholly qualified in training to manage epidemics, discover and abate possible sources of infection, and conduct in a clean and efficient way the extensive system of the city charities.

It has to be said that not one of these gentlemen has given any outward sign that he is particularly interested in sanitary science or in hospital construction and management, nor that he has any other object in life than the practice of his profession to earn a living. If there has been any word, written or spoken, by any one of these

men on the subjects which must now occupy their time and thoughts, the JOURNAL is ignorant of it; and yet every man, woman and child in San Francisco wants to be assured that these men are experts and will make efficient officers.

The first meeting of the newly constituted board was not one that could give that assurance, and was one that could only give rise to a decided feeling of unrest. Acting acknowledgedly in accordance with instructions, the new board at once declared vacant office after office in the Health Department, and not only offices that had been filled by simple appointment by previous boards, but also those that were held under the Civil Service law, evading the law by giving to new appointees new designations but without changes of duties.

Promptly following this act there was appointed a joint committee of investigation by the Board of Supervisors, consisting of the committees on Finance, on Civil Service, and that on Hospitals and Health, to inquire into the acts of the Board of Health as to their legality. This investigation is, at the time of this writing, being conducted. So far it has not developed anything to the credit of the new Board of Health. Rather, it shows that they are anxious to get place and to make places. Individually, some have confessed to ignorance of the very rules they have, in taking office, sworn to obey. The president, who is not a new appointee, acknowledged not having attended a meeting of the board during the last eight months. Others have yielded the information that they did not know the men whom they discharged for incompetence, nor what were the duties in which they were incompetent; neither did they know the qualifications of their own appointees, nor if they were fit persons; and sometimes they had never seen the persons they appointed and had only known their names for a few hours. One has given the impression of utter frivolity in the face of a public duty; and collectively they have acted as if they were responsible only to the man who appointed them, and that him only would they serve.

This is a matter which interests the medical profession, for these men are representing that profession in the city government; it is a matter that interests the people, for the Board of Health is practically the physician of the city; it is a matter that particularly interests the trades unions, for not a few of their members have to go to the public hospitals in times of accidents or of sickness; finally, it is a matter that is of paramount interest to the men themselves, for they may think that the daily press is alone in criticizing them, and may be ignorant of what is thought and said by men in the clubs, on the street and in the cars—wherever men interested in public affairs meet and talk.

ECONOMY AND EFFICIENCY.

The revolution in the San Francisco Health Department is excused or explained by the Mayor and his appointees on the ground that it is done in the interests of economy and efficiency.

The economy is shown in the reduction of expenses by the discharge of men. Under the former board the salaries of appointees from the eligible list of the Civil Service Commission was \$46,380 per annum; under the present board it is \$20,280. Under the former board the salaries of appointees not on the civil service list was \$18,420; under the present board it is \$35,520.

In effect, \$26,100 has been taken from civil service appointees, and \$17,100 has been given to places that are purely patronage positions, and while it may be thought that this looks like economy, because \$0.000 seems to be left unappropriated in the treasury, it is plain to anyone that \$17,100 spent on men whose qualifications the appointing officers do not know will in the end cost the city far more than the \$46,380 salary roll of the old board. The economy that is promised is, on its face, false economy, and that the new appointees, of unknown qualifications, can be more efficient than the old, who had had to pass an examination for their appointment, is a silly thought. Nor does anyone for a moment expect that the \$9,000 not now appropriated wil! remain long in idleness.

There are certain points where it seems to be plain that the department will be crippled. Under the last two boards the vital statistics of the city have been carefully made out and have been published. Not only were they well done, technically, but they made a creditable showing for San Francisco, and this was of value to the city commercially. There is reason to fear the abandonment of the health reports of the city, and the confusion of the statistics in the office because of insufficient and incompetent service, for the clerk who now is to perform this duty has many other duties put upon his shoulders. At another point there is likely to be crippling of the department, for there is not left at the City and County Hospital a single office which can be filled from the civil service eligible list. The whole of the officering of that part of the Health Department will be in the hands of the politicians, and the public and the patient will have to pay for it. Little enough money now is allowed the patients in the hospital; how will they fare when they have to divide that with the politicians? Finally, in order to make the forced showing of economy, the inspection force for plumbing, markets and dairies has been lessened, and consequently the work that can be done in this way is cut. Altogether the new board, hampered with a political master and political methods, has a most unenviable task before it, and if it is to accomplish anything, it must work in a very different manner from that which it has shown in the present investigation.

EMBEZZLED FUNDS.

In the showing of the disgraceful condition of affairs that has been allowed to exist in the finances of the University of California, made in the report of the expert accountants who went over the books of Mr. W. A. McKowen, the late Secretary, appears an item of considerable interest to the medical profession.

About two or three years ago, the Regents of the University took over the control of the Medical Department, and to a considerable extent conducted its finances; at the same time the standards of the Medical Department were very materially raised, and in consequence the number of students decidedly lessened. Since then, the Medical Department has had more or less of a struggle to maintain itself on a proper basis.

McKowen succeeded in embezzling nearly \$27,000 in the period between January, 1902, and October, 1903, and for a time it was feared that the Medical Department would be called upon to stand the loss of the funds paid over to the Regents. This loss, however, will not fall, it is believed, on the Medical Department, for the Regents still honor the drafts of the department and have given no notice of intention to do otherwise. If the department had lost the money, it would have been compelled to close its doors. While it is deplorable that the University should be called upon to lose this large sum, it is much better able to bear it than the department would have been, although the University itself is in need of more money.

PROFESSIONAL ETHICS.

In a personal communication recently received by the editor from one of the foremost chemists and pharmacists in the country—a man who may write after his name many degrees, including that of M. D.
—occurs the following: "In the good old days the medical profession stood as a unit in condemnation of all secrecy and monopoly in medicine. Today the professional spirit has waned to such a degree that the physician who sees advertised in his medical jour--very likely the official organ of the American Medical Association—such things as , does not stop to ask what place these things have in a scientific Materia Medica, but gives the new remedy a trial. It may be that the formula is published; it may be that there is a vague and prevari-cating statement of the composition of the remedy; or it may be that a sphynx-like silence is maintained in regard to a matter that so little (?) concerns the physician. So it has come to pass that, largely, the American physician today is prescribing and is content to prescribe secret nostrums in place of remedies of known therapeutic properties. They seem to be quite blind to the obvious fact that many of these remedies are intended for self-prescription—that the literature which accompanies them is addressed really to the patent medicine purchasing public, and not—as pretended—to the "Medical Profession." Thus the principle of secrecy in medicine has been allowed to establish itself in strongholds that were supposed to be occupied by allies of the medical profession, is the giant evil of Medicine today. The me The medical journals are all subsidized—willing to share the profits of a business that is opposed to the fundamental principles of professional ethics.

This is only too true—too bitterly true. So far have we departed from all ethical or even decent principles that few of us can without a feeling of deep moral turpitude—of shame—read Article I, Section 8 of the "Principles of Medical Ethics": "It is equally derogatory to professional character for physicians to dispense or promote the use of secret medicines... It is highly reprehensible for physicians to give certificates attesting the efficacy of secret medicines, or other substitutes used therapeutically. Probably less than ten per cent. of those who have endorsed the statement of proper ethics just quoted would be unconvicted in the event of its application to them

selves And how true is the claim of the writer quoted that men are deliberately led into thus doing wrong by their subsidized medical journals? Of all the advertisements in all the medical journals published in the country, hardly five per cent would not be ruled out by the action of this "Principle of Yet, if it were absolutely lived up to, there is but one pharmaceutical house in the United States that could advertise all of its products. The professional interests of medicine and pharmacy cannot continue for ever in the present ruinous course; eventually they will be forced to fix standards for the unofficial preparations and to see that these standards are maintained. That will necessitate some provision for the protection of the manufacturers who will thus be forced to divulge their formulas in order to conform to professional requirements.

TWO VIEWS OF ADVERTISING.

The regular school of medicine prides itself on its science, its numbers, its organization, its general high standing; and, in the main, this pride is justified. Yet there are certain things which might be altered without having anything save a beneficial effect. Note the views on advertising expressed in two journals, the one an eclectic, the other a "regular": The Chicago Medical Times (eclectic) says: "The willingness, on the part of the profession, as a whole, to prescribe the many heterogeneous compounds on the market, has two serious results: first, it encourages the manufacturer in flooding the market with compounds; and, secondly, it prevents the study of the single remedy." The St. Louis Med. and Surg. Journal for January prints an editorial to which is set the classic heading, "Let the Galled Jade Wince." The editor of this journal - "regular" sumably edited by a regular and subscribed to by regulars, most of whom have approved and endorsed the Principles of Ethics of the A. M. A., attacks Dr. Register and those who agree with him for the following expression of edi-torial opinion: "As a member of the A. M. A., I don't believe that it would be amiss or improper in any sense, or an injustice to anyone, to say that the Journal of the American Medical Association should not be the greatest advertising medium for proprietary medicines in this country." In support of this editorial opinion, Dr. Register had at least one unanswerable argument—the extract from the Principles of Medical Ethics, of the American Medical Association (which see printed at the bottom of our advertising pages). Apparently this portion of the "Principles" is placed in the class "facetiæ," by many prominent members of the association who are connected with medical journalism. The editor in question not only disagrees with Dr. Register, but seems to think the criticism is due to jealousy, and that such journals as object to seeing the association journal the biggest agent to "promote the use of secret medicines" in the United States, are actuated wholly by their own desire to secure more of this self-same advertising. He further says, in commending the publication of advertisements of proprietary medicines: "We have a number and we hope to get more." We certainly wish him every success in his worthy (?) desire.

THE "ANTITOXIN TRUST."

About the middle of January the papers (newspapers, so-called) printed a number of dispatches from Chicago to the effect that the manufacturers of antitoxins had formed a trust to raise the price of diphtheritic antitoxin. The statements thus forwarded over the "longest in the world," and otherwise, were distressing. "Price of death" demanded by the were distressing. 'trust," etc., etc. One almost began to be nervous lest he should get diphtheria and, not being either a millionaire or a trust, be forced to die the death. The city, too poor to buy antitoxin for its destitute at the enormously enhanced prices asked by the "trust," would soon become an infected spot, and then—horrors! Scarcely had the nervousness naturally due to such a terrible condition reached its climax, when reassuring word came-not by the "longest in the world," but by the less speedy if more reliable route of U. S. mail, advising us to the contrary. Within a week from the date of birth of the dreadful rumor of impending doom, one-half of the manufacturers of antitoxin in the United States wrote to the JOURNAL denying the whole story as a baseless fabrication, not even worth transmission over the "longest in the world." The Journal is relieved and its hysterical sore throat has departed without the use of the new 1000-unit immunizing dose. Singularly, all of the communications anent this subject agree in statement and in detail, so that they may presumably be accepted without question. It would appear from these statements that the explanation is rather simple. Apparently, the various manufacturers of antitoxin have come to the conclusion that they have been putting out too many sorts of packages and varieties of doses, and that this multiplicity of material was a needless extravagance. In consequence, they seem to have come together and reached a general understanding in the matter. The weaker strength of serum is no longer made, and the packages of 500 and 1500 units are no longer put up. Believing that 500 units is too small a dose to be properly immunizing, and that if 1500 units is a good dose, 2000 units is a better one, they have done away with these. Serum may now be secured in but one strength (what was formerly known as "regular," "X," etc., no longer being on the market), and at a uniform price; of course the product of each individual manufacturer is still far superior to the product of any other manufacturerabove all things we must be fair and treat all alike, or there will be envy, hatred and malice astir in the land. The prices quoted on packages of 1000, 2000, 3000 and 4000 units are respectively, \$2.00, \$3.50, \$5.00 and \$6.50, being a reduction from previous prices for the same strength serum and size package of 25, 50, 75 cents and \$1.00. "Of course there are liberal dis-

counts to druggists from these prices," but we are not informed as to the discounts. If, in this day and generation, a mere physician may dare to comment upon the producer and marketer of that which he uses, the action would seem to be rather good than bad. Too many kinds of packages and too many sizes of units only serve to render confusion worse confounded, in the tottering, wavering mind of physicians, and hence anything that releases the overtaxed brain from some of its burden of remembrance is to be welcomed. And, too, there has really been a reduction, if the figures quoted are correct, and of this there seems no good reason to doubt. We almost forgot to say that, in each case, this reduced price includes the very best possible style of aseptic serum syringe and needle.

PUBLICATIONS.

Modern Methods in the Surgery of Paralyses. By Jones and Tubby, of Liverpool and London. We are glad to note the appearance of this little new work which treats in a most exhaustive manner of the later developments in the art of Muscle Grafting, Tendon Transplantation, Arthrodesis, and the numerous operative procedures that recent experiments place at the service of the orthopedic surgeon for the relief of the paralytic deformed. From the vast experience of Mr. Jones, particularly, the book is enriched with numerous case histories and detail records of surgical procedures adopted and the final results. records are so simple, the work so well planned, and the result so evident, that they add much to the knowledge of the subject and will be of great value to the surgeon, and particularly so to the orthopedist. The book is particularly good in dealing with the deformities due to spastic paraplegia; radical operative methods, followed by persistent training, and supplemented with light braces, are enthusiastically advocated, and many examples are related of comparative cures occurring in the practice of the authors in a disease which has ever been the despair of the surgeon. Many statements are made in an axiomatic manner which at first appear startling: "By a proper appreciation of the available therapeutic and mechaniparalytic deformity,"; and "If an overstretched and partially paralyzed muscle is placed in a state of rest, it rapidly recovers." Such remarks as the above occur rather frequently, and are not loose statements of unripe opinion, but are calmly made and supported by good logic and numerous demonstrations. The work throughout proves that the writers are thoroughly conversant with all that has been done in this field, and what is very remarkable for European authors, they are fully posted in the advances made in orthopedics by American surgeons. From end to end the work of Jones and Tubby is well worth the study of those interested in the modern treatment of paralytic deformities. It is published by Macmillan & Co.

Origin of Quaternary Man in the Western Hemisphere. By A. S. Ashmead, M. D., New York. Reprinted from the St. Louis Med. and Surg. Journal. Dr. Ashmead presents an excellent discussion of the question which he presents: "Whether the American Indians... are not descendants of paleolithic man of Western Europe, who emigrated during glacial times from the Ligurian peninsula by a then existing land route, now almost completely submerged by the Atlantic Ocean, which included in its continuity the Azores, Canaries, and West Indian Islands, and connected the two hemispheres?"

TRAUMATIC NEUROSES.*

By H. G. BRAINERD, M. D., Los Angeles.

VER since Erickson promulgated his theory that spinal concussion was the cause of the nervous phenomena frequently observed after traumatism, such as blows on the head or spine and such injuries as are received in runaway accidents and railway collisions, when by reason of the velocity the concussion is great, there has been a great diversity of opinion among the medical profession in regard to the etiology of these symptoms. It has been shown that these symptoms were in many cases not of spinal, but of cerebral origin, and that they were very unlike the symptoms ordinarily observed in cerebral concussion, and further that they were not unlike the symptoms observed in neurasthenia and hysteria arising in patients not suffering from traumatism.

The different views of the condition give rise to the following terms: Traumatic neurosethenia, Traumatic hysteria, Traumatic neuroses, Traumatic psychoses, "Railway Spine," Erickson's dis-

In a symposium on this subject, at a recent meeting of the American Medical Association, we find the opinion of the railway surgeons quite diametrically opposed to the opinion of the neurologists, as is shown by the following quotation from Dr. Bevan's paper:

My report is an indictment of the course usually pursued by the medical attendant in handling these cases. The one point which I especially desire to make clear is this: The medical attendant, in the majority of cases, is more than any other factor responsible for the development and continuance of the condition known as traumatic neurosis.

The condition, traumatic neurosis, is a mental state, not a disease with organic lesion. The mental state due directly to the injury and mental shock is transient, and under proper conditions and advice is soon recovered from, in the vast majority of cases. When the condition persists, the continuance is due to suggestions furnished by medical attendants, legal advisers, interested and sympathetic friends and relatives or auto-suggestions, with either money or sympathy in view.

Not long since the chief surgeon of an important railway company said to me: "We no longer have cases in our courts of 'Railway Spine,' for we have been able to show successfully by the employment of detectives that these patients are either malingering or that they grossly exaggerate the seriousness of their symptoms."

We are no doubt influenced in our opinion as to the causation and types of certain forms of disease very largely by our personal experience, especially if that may have been somewhat extensive, and no doubt the reason why the opinion as expressed by Dr. Bevan prevails largely among railway surgeons is because they so often meet cases of malingering and of exaggeration of symptoms in people who are claiming compensation for injuries.

traumatic neuroses ofttimes make rapid recoveries after the settlement of their litigation, does not disprove the genuineness of their illness. Pending litigation is most disastrous to the recovery of cases of neurasthenia or hysteria where the cause of the trouble was not traumatism and where the litigation was not for compensation for injury and it is not strange that, once the burden of litigation is taken from their shoulders, those people suffering from traumatic neuroses make a prompt recovery, even where the litigation has not resulted favorably to them.

It is certain that traumatism, without causing

The fact that people who are suffering from

It is certain that traumatism, without causing any external, visible signs, may produce epilepsy and insanity and each of these two conditions may also be produced by profound mental shock.

It is commonly accepted by the profession that neurasthenia and hysteria may be caused by great mental shock or strain, by sexual excesses, by the use of alcohol or other toxic substances, by la grippe and other diseases; in short, by anything which seriously impairs the nutrition and consequently the function of the neurons. It seems to me not irrational to believe that concussive violence to the head or spine may impair the nutrition and later the function of the cerebral and spinal neurons without actual destruction of them.

I have until recently felt very sure that fright, or mental shock was largely responsible for a neurosis which arises after a serious accident, and that it might be the sole cause without any visible physical injury. That it is not essential to the development of traumatic neurosis, I think will be shown by the following cases:

Case I.

Miss C. S., age 26, with previous good health and good family history, whose energy and ambition had succeeded in securing for herself an important position in a large abstract office, took her vacation in July, 1901, in the northern part of this State. One day while swinging in a hammock, the rope or fastening at the foot-end of the hammock broke and she fell about two feet to the porch floor, striking on her back at about the waist line. She was considerably shaken up by the jar, but did not consider herself seriously injured. This occurred on the evening of the 11th of July, and though she had some soreness of the back on the morning of the 13th, she went to San Francisco and staid until the evening of the 16th in that city, doing a great deal of running about, shopping, visiting, etc. It was not until the 15th, four days after the injury, that she had sufficient pain to discover that her back had been seriously hurt at the time of her fall. She returned to Los Angeles on the 17th and the following day consulted her physician, a well-known railway surgeon, who certainly did nothing by his advice to alarm her or bring on such serious symptoms as followed. She resumed her work in the office on the 18th and continued to do her work for a week, when she felt so prostrated, confused, and had so much pain in her back, which was increased by being on her feet, that she was obliged to give it up, as she then supposed, for a few days' rest. After remaining at home and keeping quiet for five days, instead of being better, she was suffering so much pain in the head and back and

^{*}Read at the Thirty-third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1903.

there was such extreme prostration, that she was forced to take to her bed and remain there for six weeks. During this time there was continuous and severe pain in the head and back, confusion of thought, slow mental reaction, tremor of tongue, lips and hands, slight exaggeration of knee jerks (but no ankle clonus, no disturbance of sphincters), anesthetic patches on back and limbs, dermatitis factitia, clammy hands and feet, extreme sensitiveness to pressure over the spine throughout nearly its entire length. Her voice had a weak, plaintive, far-away sound, often heard in malingerers. At times there was a mild delirium in which she failed to recognize her friends or her surroundings, though in her own room in her own home. She could usually be aroused from this condition by special effort. Her appetite was very poor and only by much insistence could she be induced to take a very moderate amount of nourishment. The little sleep which she secured under the influence of hypnotics was disturbed by frightful dreams, the pulse was rapid and weak. Though there was little or no fever, there was at times profuse perspiration.

It was more than a month after she went to bed before she began to convalesce, and then the convalescence was slow, so that it was November 15th before she was able to resume her duties at the office, but she was unable to read, study, or do her work with the promptness, clearness of mind and dispatch which characterized her before the injury. And after a few months she was obliged to give up her position and take one which was less demanding upon her. Now, nearly two years after the accident, she has frequent headaches, rarely a week passing in which she is free from one, and slight mental or physical exertion is liable to precipitate a headache and pain in the back so severe as to necessitate her staying in bed for several days.

On examination a few weeks ago, I found that there was great sensitiveness to pressure over the cervical, mid-dorsal and lumbar regions, also extending out over the nerves emerging from those same regions. The wrist and knee-jerks are still very much exaggerated and she says that frequently her left leg gives out so that she cannot walk without limping. She certainly is far from well, continuing to manifest a train of symptoms such as were entirely foreign to her history previous to her injury in July, 1900.

In this case there is eliminated all element of litigation or hope of securing compensation or sympathy for her injuries. It certainly was not by reason of the advice given her by her physician, as is claimed by Dr. Bevan as the great source of these symptoms. Her physician has for many years been the surgeon for the Southern Pacific Railway and also for the Consolidated Electric Railway of Los Angeles, which has given him opportunities for observation of a large number of cases of traumatic neuroses, and prior to the observation of this case his views were very nearly in accord with those expressed by Dr. Bevan. All element of fright or long-continued observation of horrible scenes, such as sometimes occur in railway wrecks, was also entirely wanting in this case.

Miss J. H., age 17, with good family history and no previous ill health, a fresh, healthy-looking girl, who has been very active mentally and physically, in September, 1900, while playing, wrenched her right knee and thought from the feeling that the knee-cap was thrown out of place. She could not walk on it for two weeks or more, but after going to the sea coast it gradually improved, and in six weeks it was all right again and she had no further trouble with it until the following June, when she noticed that the same knee felt weak, and one morning, on sneezing, experienced a peculiar sensation in the knee, followed by a slight degree of pain. Fearing that there would be a return of the former trouble, she kept very quiet, but in spite of favoring the knee, she gradually lost the use of that leg, so that she could not bear her weight upon it and was obliged to go on crutches for several months, during which time she was under the care of a physician, who tried a variety of treatments. external applications, elastic bandage, and finally a plaster-paris cast, which she wore for more than a After several months it began to improve, and this she now attributes to injections of iodoform emulsion.

The following September she was able to go to school, could go up and down stairs with the assistance of a cane and by Christmas-time, or six months after the beginning of the trouble, she had so far recovered that she considered her knee well and it has given her no serious trouble since. At times during the trouble with her knee, she had a peculiar sensation in her right hip, which she said was not exactly a pain, but felt very bad. Last November, while going down the steps in the evening, she fell, striking upon both knees. It did not hurt very much at the time, but she feared that it would cause serious trouble with her hip; however, she went that same night to a social gathering and the following day rode several miles to witness a ball game, and on her return home that night felt so much discomfort in the right hip, and it felt so weak, that she was sure there was to be a return of such trouble as she had had in her knee. This induced her to stay in bed for a week, but as there was no pain, swelling or other local evidence of trouble, she got up, but was unable to bear her weight unassisted on the right leg; since then she has found it necessary to walk with a cane and even then walks with a limp.

On making the most careful examination, I could not find that there was any pain or restriction of mobility or any disturbance of sensation, electrical reactions, or general muscular condition. She could walk with a slight limp by simply touching lightly a small cane, but when the cane was removed, found it absolutely impossible to sustain her weight for even a few steps. She is anxious to get along without the cane and certainly has no expectation of compensation or sympathy by reason of her hysterical paralysis.

The opponents of Erickson's views have long maintained that if the symptoms were due to the effects of the injury, they would become less pronounced as time went on and not arise after an interval of some days following the receipt of the The fact that the symptoms are not complained of by the patient for many hours or sometimes for days after receiving the injury, has been explained by some authors as being due to the fact that the mind of the patient was too much preoccupied by the terrible scenes around him to notice serious personal inconvenience and pain. The cases, however, which we have related, show that at least in some cases there is no such explanation to be offered, as there was no fright, horror or mental shock connected with the accidents to mask or disguise the early appearance of the symptoms.

As I before remarked, we are inevitably largely influenced by our personal experience in our opinions of a given disease. The failure to observe a case of traumatic neurosis that does not have in it the elements of exaggeration or malingering, is likely to induce in our minds the belief that all cases are malingerers or grossly exaggerate their symptoms.

My conclusions from these cases are: I. That there was no previous history of hysteria or neurosis. 2. That there was no severe concussive force experienced by either. 3. That they were cases of traumatic neurosis and not of malingering. 4. That neither the advice or solicitude of the physician, nor the suggestions of friends or attorneys, anxious for litigation, caused the illness. 5. That there was no alarm before the injury, nor horror at the surroundings afterward, consequently that it was not caused by mental shock. 6. Traumatism was the exciting cause in both cases. 7. That the same conditions may hold good in other cases, even though there be litigation in connection with them.

I wish to acknowledge my indebtedness to Doctors F. K. Ainsworth and J. S. Champion for the opportunity to see and report these cases.

PERITONEAL ADHESIONS.*

THEIR SYMPTOMATOLOGY, PATHOLOGY AND PREVENTION.

By E. E. KELLY, M. D., San Francisco.

(Concluded from page 11 January JOURNAL.)

The Trendelenburg position, in pelvic and lower abdominal operations, by favoring the receding of the abdominal contents toward the diaphragm, removes them from the operative field and lessens the shock and lowered vitality due to handling. Martin, of Brussels, has suggested the use of sterilized olive oil in the abdominal cavity to prevent adhesions. Others have suggested the painting of raw surfaces with collodion. Robt. T. Morris has advised sprinkling the denuded surfaces with dithymol-diiodid, stating that the drug is insoluble in serous exudates, and that it forms with coagulated lymph a protective covering that cannot easily be brushed off. The same author has later used a very thin gold-beater's skin made from the peritoneum of the ox. By experiments upon rabbits he came to the following conclusion: Cargile membrane does not occasion suppuration; causes only slight adhesions which are absorbed in thirty days; causes very little disturbance of the peritoneum; does not furnish a culture medium for bacteria; adheres closely, does not need suture, is not easily dislodged and protects injured surfaces till endothelium reforms. Morris made use of Cargile membrane with great

satisfaction in a case of recurrent adhesions where the chemical film had been formerly used and had failed to prevent adhesions. Howard Kelly has suggested fixing the uterus in retroflexion to cover raw surfaces in Douglas cul-de-sac. After treatment is of great importance in preventing adhesions. The abdominal straps should not be too tight, as they fix the organs more or less, permitting adhesions to form before peristalsis has become re-established. The early use of cathartics has been advised to stimulate peristalsis, thus preventing adhesions of the intestines. Doubtless they may be useful in some cases, but since adhesions form in a very few hours, usually before the partially paralyzed bowel recovers its peristaltic tone, their utility must be limited. However, since recent adhesions remain soft for some time, it is well to stimulate peristaltic action as soon as the stomach will permit the use of laxatives. Early and frequent change of position is grateful to the patient and very useful in preventing adhesions, unless the patient is too tightly strapped. Cleveland has recommended the use of oxygen gas to inflate the intestines and to stimulate peristalsis. He claims it can be used earlier with less distress to the patient and more certain results than fluid enemata, and has the advantage of supplying oxygen to the tissues by its absorption.

In conclusion, it must be admitted that any and all of these measures will fail in a certain percentage of cases. Although prevention, the ideal result, is not always possible, we may, by the various methods herein suggested, minimize the evils arising from peritoneal adhesions.

DISCUSSION.

Dr. J. H. Barbat, San Francisco: There is no question but that the handling of the abdominal contents produces adhesions by roughening the surface, and the avoidance of any handling of the abdominal contents will necessarily limit the number of adhesions. This may be obtained by making short incisions and rapid operations. Large incisions, as Dr. Kelly has shown, necessarily expose the abdominal contents, and the exposure of the abdominal contents leads to the formation of adhesions. Therefore, operate through as small incisions as possible with safety. I have found that the introduction of any substance into the abdominal cavity favors adhesions rather than diminishes them. My best results were obtained by using massage, and it can be shown that a very large majority of the adhesions which do occur in every case in which the abdomen is opened, are temporary, or adhesions which break up of themselves, and after two years we will find very many cases which show no sign of adhesions; whereas, if all these cases were opened in one month, they would show adhesions. I speak from experience of operating on animals also.

Dr. A. Lobingier, Los Angeles: Dr. Kelly's paper touches on more prominent points than I often hear. The question of abdominal adhesions, as has been indicated by the last speaker, is not a question which reaches such large proportions when we consider how much of the abdominal surface is exposed, and

^{*}Read at the Thirty-third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1908.

how freely we are able to handle the peritoneum without damage, largely from the fact that many of these adhesions will become absorbed. Infection of the peritoneum has long been known as a cause of adhesions. Adhesions formed by an infected peritoneum are not so permanent as those which form in thick fibrous masses and are of a permanent char-It is well to remember that infection of the intestines is to be regarded seriously. I wish that Dr. Kelly had touched more upon the adhesions of the right hypochondrium, which are the most annoying. I have seen very mild adhesions between the pylorus and gall-bladder, very thin, narrow bands productive of persistent vomiting, absolutely intractable to anything but removal. We know that in our gall-bladder and pancreatic work we have had most serious disturbances by persistent vomiting, and al-ways as a result of very slight adhesions in and about the lower end of the stomach and gall-bladder. Frequently the colon is involved. We find that the omentum may be knotted up, uniting the gall-bladder in a dense mass. I had a patient a short time ago who had been previously operated on for hernia, in whom I found the appendix lying on the under surface directly down past the internal ring. It was adherent for its whole dorsal aspect. It seems to me that the use of gloves will aid us very much in keeping the interior of the abdomen sterile. I use gloves in all operations, and have for ten years. Skin is always septic. I have used the Cargile membrane with the very best results. Dr. Murphy has used nitrogen gas instead of oxygen gas.

Dr. W. I. Terry, San Francisco: I think the adhesions due to mechanical cause are much more likely to be absorbed, and are absorbed quicker, than in-This has been touched upon by Dr. Barbat, and I agree that adhesions do disappear in large measure when not due to infection. I wish also to add my word of approval in the use of rubber Not from the mechanical irritation, but from gloves. the point of cleanliness.

Dr. C. D. Lockwood, Los Angeles: I got here too late to hear all of the paper, but am very much interested in the subject. There is one thing that Krause ested in the subject. The endothelium ruptured, reproduces itself. Consequently, I believe that what was said just preceding is true about mechanical adhe-sions recovering much more rapidly than infectious ones. And I believe that the use of rubber gloves is a valuable thing. Norris claims that the long exposure and the use of rubber gloves increased the danger of adhesions. In this connection, I believe that the Murphy rubber dam is a valuable thing. whole abdomen is covered with a smooth surface, and the abdominal organs and omentum can be laid upon the abdomen without great injury, as when laid upon gauze sponges. I believe it will be an important factor in the prevention of adhesions.

Dr. L. Brunn, San Francisco: I have also been very much interested in this subject. It is very true that the endothelial cells do reproduce themselves in a few days; sometimes almost over night. Sometimes the stitch placed in the peritoneum will be covered over with peritoneum without adhesions. These adhesions probably had disappeared in a very short I do not think they cause any trouble. We have not as yet a good classification of adhesions. I believe that adhesions due to some causes are more difficult to cure than adhesions due to other causes. I have seen a good many patients operated upon for adhesions with or without previous operation.

Dr. J. Rosenstirn, San Francisco: I believe the subject of abdominal adhesions interests every ab-

dominal surgeon. Perhaps there is not enough stress laid upon the necessity of uniting severed surfaces. Pain is due to adhesions formed on rough peritoneai and ununited peritoneal surfaces during operations. In those cases, naturally, the possibility of a double cause is present. I believe that it should be impressed upon all that every peritoneal surface should be well united before closing. The objection against gloves by prolonging the operation can be easily overcome by using the rubber gloves, which certainly allow the handling of the peritoneum and organs that the fingers allow. They have been used for quite a long time.

Dr. O. O. Witherbee, Los Angeles-Just a word as to the symptoms of adhesions. I do not think that we can satisfy ourselves by the amount of pain as to whether adhesions have actually formed. I believe that if adhesions have formed that we have pain invariably. I am satisfied in many cases, especially in the case of appendicitis and perforation and discharge, where the intestines are agglutinated and permanently adhesive, that these patients go on with very little or no pain. When we have some movable stricture fixed, as the reader of the paper said-for instance, fixation of the appendix in broad ligament, we will have pain. Whether pain or not, does not determine whether there are adhesions or not. I held the abdominal cavity open for five hours and ten minutes, and my patient is now living, and so far, she has no adhesions or symptoms of them up to the present time. With reference to the gloves: if you are uncertain that your hands are clean, you should certainly wear gloves, but if you can prevent the perspiration of the hands and forearms, it is better to operate without gloves. The ordinary operator, I am sorry to say, does not take enough pains in sterilizing his hands. He scrubs for the ordinary length of time, then he goes through the sterilizing solution and makes plunges into the bi-chloride, and from that he goes into the sterilizing solution to wash off the bichloride which he is depending upon. I maintain that you can sterilize the hands with bichloride after ten minutes. sterilize any instrument with bichloride without boiling, you would not think of doing it inside of ten

Dr. E. E. Kelly, San Francisco-I have very little to add. I approve of everything said. There is no question but what the time of the operation has considerable effect upon the formation of adhesions. Dense adhesions are the result of destruction of the serous membrane more than simply destruction of endothelium. In the pelvic cavity and in the region of the liver, especially in the pelvic cavity, however, a raw surface of the adherent intestinal coil is very dangerous because it binds the intestinal loops to one another. Adhesions are not followed by any severe pain or after results in cases of drainage, because the adhesions are between surfaces in their natural position, but where organs are in an abnormal position with adhesions to the abdominal wall, then the symptoms follow. There is no doubt but what adhesions occur many times which never produce any symptoms at all. I believe in the use of gloves.

REFERENCES:

- George Gray Ward. American Journal of Obstetrics, June, 1901.
 Byron Robinson. Medical Record, July 28, 1900.
 Turck. Medical Record, Vol. LVII. p. 207.
 Cleveland. Medical Record, Vol. LIX, p. 1.
 Malcom. The Lancet, 1901. Vol. 1, p. 75.
 Shively. New York Medical Journal, Vol. XL, p. 293.
 Morris. Medical Record, Vol. LXI, p. 773.
 Harris. American Journal of Obstetrics, Vol. XL, p. 461.

CASES OF TUBERCULOSIS OF THE GEN-ITO-URINARY TRACT, WITH RE-MARKS.*

By GEORGE CHISMORE, M. D., San Francisco. (Concluded from page 8, January JOURNAL.)

Case 3.-C. N., aged 21, American, single, clerk. Health good until an attack of la grippe in the early part of 1895, after which he began to suffer from frequent micturition; urine tinged with blood at times. Pain in penis and also in neck of bladder, which grew gradually worse. His bladder was washed out, but his suffering increased so much that this process was soon omitted, and when he came to me, June 27, 1895, there has been no local treatment for some time. He was then passing 1520 cc. of urine in 24 hours, 20 voidings. It was reddish, turbid, strong, ammoniacal odor, alkaline, reaction sp. gr. 1017; trace of albumen; no sugar; contained 18.24 gms. of urea. Sediment, copious, reddish, viscid. Crystals of triple phosphate numerous. A few pavement cells, pus and blood corpuscles; no casts. Examination for tubercle bacilli negative. The symptoms were so strongly indicative of stone that he was searched with negative results. The unusual amount of disturbance which followed led to the suspicion of tuberculosis of the genito urinary tract, in spite of the failure to find the bacillus. All local interference was therefore avoided until June 30, 1897, when, failing to find the tubercle bacillus in many examinations, I again searched him for stone, with negative results. He had lowered the number of daily voidings to eight, but they were always attended with pain, and after the examination became more frequent for nearly a month. On October 9, 1897, he had a sharp attack of pain in the left kidney, easily controlled by an anodyne, and he noted bright blood in the urine the following morning. January 18, 1898, he had a bad spell, during which he had to pass his urine as often as 20 times in 24 The tubercle bacilli were now found, and since that time it has always been easy to demonstrate their presence. Under cod liver oil, tonics and general hygienic measures, he has improved somewhat, gained a little in strength, has been able to work, and is apparently steadily gaining. On April 24, 1898, he reports by letter as not suffering so much, but passing urine hourly during the daytime and five times at night. At no time as yet has there been any lesion of the prostate gland, testes or cord.

Examination, April 4, 1903 (eight years after first attack): In excellent health. Married eleven months since. Sexually normal. Voids urine six to seven times daily. Promised to send urine for analysis and did it. His urine was normal in quantity, devoid of noxious elements, no bacilli.

Case 4.-A. D. K., American, aged 50 (?), attorney, widower. Came under observation May 8, 1896, with epididymitis of the right side; left subsequently similarly involved. Attributed his attack to muscular strain. Had suffered years ago from urethritis, followed by obstinate gleet, from which he at length re-covered. General health good. Family history of tuberculosis on mother's side. No frequency of mic-The diagnosis of tuberculous epididymitis was made from the peculiar woodeny masses of deposit that made up the indurations in the organ. Examination of urine 1440 cc. in 24 hours. Voided 4 times. Bright yellow, clear, translucent, normal odor. acid, sp. gr. 1017. No albumen nor sugar. 21.6 gms. of urea Copious, white cloud of sediment No crystals. A few pavement cells. A few corpuscles. No casts. No tubercle bacilli. With but little pain, the case went on to suppuration, attended with moderate hydrocele, and the left epididymis pursued a similar course. In the discharge from the abscess tubercle bacilli were repeatedly found. It was more than a year before the last sinus closed. The patient attended to business all the time.

Examination, March 25, 1898: In good health. Tubercular masses small, but plainly perceptible to the touch in each epididymis. Sexual appetite unchanged and power not impaired, but thinks the discharge on emission more scanty than formerly.

Examination, April 15, 1903. Still in excellent health. Has been married two years. Sexually all right, but no children.

Case 5.-D. H. B., aged 29, American, married, laborer. General health poor for several years. Gonorrhea 8 years ago. Perineal section for stricture and urethral fistula in 1888; healed promptly. In November, 1894, he began to suffer from frequent micturition. His bladder was washed out three times, when he became so much worse that that mode of treatment was abandoned. About two months before coming to me the fistula reopened in the perineum. Saw him first June 25, 1895. He was thin and worn. Voided urine with great pain and at short intervals. 20 times during 24 hours; the tubercle bacilli were present in great numbers. There was a tight stricture of the deep urethra just anterior to the internal opening of the fistula. So far as could be made out, Perineal section was the lungs were not involved. made on June 26th, and healing was fairly prompt. He put on flesh, gained strength, and returned to the country July 30, 1895, and went to work. He came back to me September 22, 1895, in very bad condition. Micturition frequent and painful; urine loaded with bacilli. By the end of October the right kidney could be felt enlarged and tender. On account of the great pain in the kidney, operation was considered; but, the suffering lessening, it was not done, as it was plainly evident that a fatal termination was near at hand. He sank progressively and died January 31, 1896.

Autopsy: Emaciation extreme. Right lung stuffed with crude tubercles; left lung, considerable amount of tubercular deposit. Heart normal. Bowels matted together by inflammation of numerous and extensive tubercular foci. Right kidney three times natural size, firmly adherent to adjacent organs, and riddled by tuberculous abscesses. Ureter dilated and tubercular. Left kidney normal. Bladder wall soft and very easily torn. Entire mucus coat a pultaceous mass of tubercular degeneration. Prostate normal in size, burrowed by sinuses.

Case 6.-R. M., aged 16. This boy had excellent health up to a few months ago, when, after a long ride in the drenching rain, he began to pass water frequently. He lived in the country and his family physician tried simple medicinal treatment, without He was brought to me April 4, 1901. He was passing urine thirty times in twenty-four hours; it was reddish, turbid, strong odor, sp. gr. 10.11; it contained .02 albumen and 14.20 gms. urea; crystal of oxalate of lime, blood and pus corpuscles plentiful. There was always pain in passing water, for the most part in the glans penis, with desire to stool, and he was subject to paroxysms of great severity at irregular intervals. He was in fair physical condition and had no other ailment. He remained under my care three months. I suspected tuberculosis at once and caused repeated examinations to be made: all were negative. The pain resembling the pain of stone, and not finding bacilli after a ten days' search, I decided to pass a searcher; this I did under cocaine. The urethra was sensitive and would only admit No. 10. F. The bladder would only hold 3 drachms. I found nothing in the bladder, but just as the instrument left the neck I

how freely we are able to handle the peritoneum without damage, largely from the fact that many of these adhesions will become absorbed. Infection of the peritoneum has long been known as a cause of adhesions. Adhesions formed by an infected peritoneum are not so permanent as those which form in thick fibrous masses and are of a permanent character. It is well to remember that infection of the intestines is to be regarded seriously. I wish that Dr. Kelly had touched more upon the adhesions of the right hypochondrium, which are the most annoying. I have seen very mild adhesions between the pylorus and gall-bladder, very thin, narrow bands productive of persistent vomiting, absolutely intractable to anything but removal. We know that in our gall-bladder and pancreatic work we have had most serious disturbances by persistent vomiting, and al-ways as a result of very slight adhesions in and about the lower end of the stomach and gall-bladder. Frequently the colon is involved. We find that the omentum may be knotted up, uniting the gall-bladder in a dense mass. I had a patient a short time ago who had been previously operated on for hernia, in whom I found the appendix lying on the under surface directly down past the internal ring. It was adherent for its whole dorsal aspect. It seems to me that the use of gloves will aid us very much in keeping the interior of the abdomen sterile. I use gloves in all operations, and have for ten years. Skin is always septic. I have used the Cargile membrane with the very best results. Dr. Murphy has used nitrogen gas instead of oxygen gas.

Dr. W. I. Terry, San Francisco: I think the adhesions due to mechanical cause are much more likely to be absorbed, and are absorbed quicker, than infected ones. This has been touched upon by Dr. Barbat, and I agree that adhesions do disappear in large measure when not due to infection. I wish also to add my word of approval in the use of rubber gloves. Not from the mechanical irritation, but from the point of cleanliness.

Dr. C. D. Lockwood, Los Angeles: I got here too late to hear all of the paper, but am very much interested in the subject. There is one thing that Krause has shown us-that the endothelium ruptured, reproduces itself. Consequently, I believe that what was said just preceding is true about mechanical adhesions recovering much more rapidly than infectious And I believe that the use of rubber gloves is a valuable thing. Norris claims that the long exposure and the use of rubber gloves increased the danger of adhesions. In this connection, I believe that the Murphy rubber dam is a valuable thing. The whole abdomen is covered with a smooth surface, and the abdominal organs and omentum can be laid upon the abdomen without great injury, as when laid upon gauze sponges. I believe it will be an important factor in the prevention of adhesions.

Dr. L. Brunn, San Francisco: I have also been very much interested in this subject. It is very true that the endothelial cells do reproduce themselves in a few days; sometimes almost over night. the stitch placed in the peritoneum will be covered over with peritoneum without adhesions. These adhesions probably had disappeared in a very short time. I do not think they cause any trouble. We have not as yet a good classification of adhesions. I believe that adhesions due to some causes are more difficult to cure than adhesions due to other causes. I have seen a good many patients operated upon for adhesions with or without previous operation.

Dr. J. Rosenstirn, San Francisco: I believe the subject of abdominal adhesions interests every ab-

dominal surgeon. Perhaps there is not enough stress laid upon the necessity of uniting severed surfaces. Pain is due to adhesions formed on rough peritoneai and ununited peritoneal surfaces during operations. In those cases, naturally, the possibility of a double cause is present. I believe that it should be impressed upon all that every peritoneal surface should be well united before closing. The objection against gloves by prolonging the operation can be easily overcome by using the rubber gloves, which certainly allow the handling of the peritoneum and organs that the fingers allow. They have been used for quite a long time.

Dr. O. O. Witherbee, Los Angeles-Just a word as to the symptoms of adhesions. I do not think that we can satisfy ourselves by the amount of pain as to whether adhesions have actually formed. I believe that if adhesions have formed that we have pain invariably. I am satisfied in many cases, especially in the case of appendicitis and perforation and discharge, where the intestines are agglutinated and permanently adhesive, that these patients go on with very little or no pain. When we have some movable stricture fixed, as the reader of the paper said—for instance, fixation of the appendix in broad ligament, we will have pain. Whether pain or not, does not determine whether there are adhesions or not. I have held the abdominal cavity open for five hours and ten minutes, and my patient is now living, and so far, she has no adhesions or symptoms of them up to the present time. With reference to the gloves: if you are uncertain that your hands are clean, you should certainly wear gloves, but if you can prevent the perspiration of the hands and forearms, it is better to operate without gloves. The ordinary operator, I am sorry to say, does not take enough pains in sterilizing his hands. He scrubs for the ordinary length of time, then he goes through the sterilizing solution and makes plunges into the bichloride, and from that he goes into the sterilizing solution to wash off the bichloride which he is depending upon. I maintain that you can sterilize the hands with bichloride after ten minutes. If you sterilize any instrument with bichloride without boiling, you would not think of doing it inside of ten

Dr. E. E. Kelly, San Francisco-I have very little to add. I approve of everything said. There is no question but what the time of the operation has considerable effect upon the formation of adhesions. Dense adhesions are the result of destruction of the serous membrane more than simply destruction of endothelium. In the pelvic cavity and in the region of the liver, especially in the pelvic cavity, however, a raw surface of the adherent intestinal coil is very dangerous because it binds the intestinal loops to one another. Adhesions are not followed by any severe pain or after results in cases of drainage, because the adhesions are between surfaces in their natural position, but where organs are in an abnormal position with adhesions to the abdominal wall, then the symptoms follow. There is no doubt but what adhesions occur many times which never produce any symptoms at all. I believe in the use of gloves.

REFERENCES:

- George Gray Ward. American Journal of Obstetrics, June, 1901.
 Byton Robinson. Medical Record, July 28, 1900.
 Turck. Medical Record, Vol. LVII. p. 207.
 Cleveland. Medical Record, Vol. LIX. p. 1.
 Malcom. The Lancet, 1901. Vol. I. p. 75.
 Shively. New York Medical Journal, Vol. XL, p. 293.
 MOTIS. Medical Record, Vol. XXI, p. 773.
 Hattis. American Journal of Obstetrics, Vol. XL, p. 461.

CASES OF TUBERCULOSIS OF THE GEN-ITO-URINARY TRACT, WITH RE-MARKS.*

By GEORGE CHISMORE, M. D., San Francisco.

(Concluded from page 8, January JOURNAL.)

Case 3.-C. N., aged 21, American, single, clerk. Health good until an attack of la grippe in the early part of 1895, after which he began to suffer from frequent micturition; urine tinged with blood at times. Pain in penis and also in neck of bladder, which grew gradually worse. His bladder was washed out, but his suffering increased so much that this process was soon omitted, and when he came to me, June 27. 1895, there has been no local treatment for some time. He was then passing 1520 cc. of urine in 24 hours, 20 voidings. It was reddish, turbid, strong, ammoniacal odor, alkaline, reaction sp. gr. 1017; trace of albumen; no sugar; contained 18.24 gms. of urea. Sediment, copious, reddish, viscid. Crystals of triple phosphate numerous. A few pavement cells, pus and blood corpuscles; no casts. Examination for tubercle bacilli negative. The symptoms were so strongly indicative of stone that he was searched with negative results. The unusual amount of disturbance which followed led to the suspicion of tuberculosis of the genitourinary tract, in spite of the failure to find the bacillus. All local interference was therefore avoided until June 30, 1897, when, failing to find the tubercle bacillus in many examinations, I again searched him for stone, with negative results. He had lowered the number of daily voidings to eight, but they were always attended with pain, and after the examination became more frequent for nearly a month. On October 9, 1897, he had a sharp attack of pain in the left kidney, easily controlled by an anodyne, and he noted bright blood in the urine the following morning. January 18, 1898, he had a bad spell, during which he had to pass his urine as often as 20 times in 24 The tubercle bacilli were now found, and since that time it has always been easy to demonstrate their presence. Under cod liver oil, tonics and general hygienic measures, he has improved somewhat, gained a little in strength, has been able to work, and is apparently steadily gaining. On April 24, 1898, he reports by letter as not suffering so much, but passing urine hourly during the daytime and five times at night. At no time as yet has there been any lesion of the prostate gland, testes or cord.

Examination, April 4, 1903 (eight years after first attack): In excellent health. Married eleven months since. Sexually normal. Voids urine six to seven times daily. Promised to send urine for analysis and did it. His urine was normal in quantity, devoid of noxious elements, no bacilli.

Case 4.—A. D. K., American, aged 50 (?), attorney, widower. Came under observation May 8, 1896, with epididymitis of the right side; left subsequently similarly involved. Attributed his attack to muscular strain. Had suffered years ago from urethritis, followed by obstinate gleet, from which he at length recovered. General health good. Family history of tuberculosis on mother's side. No frequency of micturition. The diagnosis of tuberculous epididymitis was made from the peculiar woodeny masses of deposit that made up the indurations in the organ. Examination of urine 1440 cc. in 24 hours. Voided 4 times. Bright yellow, clear, translucent, normal odor, acid, sp. gr. 1017. No albumen nor sugar. 21.6 gms. of urea Copious, white cloud of sediment No crystals. A few pavement cells. A few corpuscles. No casts. No tubercle bacilli. With but little pain, the case went on to suppuration, attended with moderate hydrocele, and the left epididymis pursued a similar

course. In the discharge from the abscess tubercle bacilli were repeatedly found. It was more than a year before the last sinus closed. The patient attended to business all the time.

Examination, March 25, 1898: In good health. Tubercular masses small, but plainly perceptible to the touch in each epididymis. Sexual appetite unchanged and power not impaired, but thinks the discharge on emission more scanty than formerly.

Examination, April 15, 1903. Still in excellent health. Has been married two years. Sexually all right, but no children.

Case 5.-D. H. B., aged 29, American, married, laborer. General health poor for several years. Gonorrhea 8 years ago. Perineal section for stricture and urethral fistula in 1888; healed promptly. In November, 1894, he began to suffer from frequent micturition. His bladder was washed out three times, when he became so much worse that that mode of treatment was abandoned. About two months before coming to me the fistula reopened in the perineum. Saw him first June 25, 1895. He was thin and worn. Voided urine with great pain and at short intervals, 20 times during 24 hours; the tubercle bacilli were present in great numbers. There was a tight stricture of the deep urethra just anterior to the internal opening of the fistula. So far as could be made out, the lungs were not involved. Perineal section was made on June 26th, and healing was fairly prompt. He put on flesh, gained strength, and returned to the country July 30, 1895, and went to work. He came back to me September 22, 1895, in very bad condition. Micturition frequent and painful; urine loaded with bacilli. By the end of October the right kidney could be felt enlarged and tender. On account of the great pain in the kidney, operation was considered; but, the suffering lessening, it was not done, as it was plainly evident that a fatal termination was near at hand. He sank progressively and died January 31, 1896.

Autopsy: Emaciation extreme. Right lung stuffed with crude tubercles; left lung, considerable amount of tubercular deposit. Heart normal. Bowels matted together by inflammation of numerous and extensive tubercular foci. Right kidney three times natural size, firmly adherent to adjacent organs, and riddled by tuberculous abscesses. Ureter dilated and tubercular. Left kidney normal. Bladder wall soft and very easily torn. Entire mucus coat a pultaceous mass of tubercular degeneration. Prostate normal in size, burrowed by sinuses:

Case 6.-R. M., aged 16. This boy had excellent health up to a few months ago, when, after a long ride in the drenching rain, he began to pass water He lived in the country and his family physician tried simple medicinal treatment, without success. He was brought to me April 4, 1901. He was passing urine thirty times in twenty-four hours; it was reddish, turbid, strong odor, and sp. gr. 10.11; it contained .02 albumen and 14.20 gms. urea; crystal of oxalate of lime, blood and pus corpuscles plentiful. There was always pain in passing water, for the most part in the glans penis, with desire to stool, and he was subject to paroxysms of great severity at irregular intervals. He was in fair physical condition and had no other ailment. mained under my care three months. I suspected tuberculosis at once and caused repeated examinations to be made; all were negative. The pain resembling the pain of stone, and not finding bacilli after a ten days' search, I decided to pass a searcher; this I did under cocaine. The urethra was very sensitive and would only admit No. 10. F. The bladder would only hold 3 drachms. I found nothing in the bladder, but just as the instrument left the neck I

had an elusive sense of touching a small stone. This decided me to have recourse to a gradual dilation, in order to get room for a small lithotrite. I accomplished this by gently passing sounds under cocaine twice weekly, seven times; then a thorough search satisfied me there was no stone. I was now sure that the case was tuberculosis, although I never found the bacilli. I frankly explained my views to his parents, and they took him home. I felt at that time that my instrumentation had been unwise and that his sufferings had been increased thereby. Some time after leaving my care he was taken to a surgeon, who instituted a course of lavage with injections of argenti nitras; this was not continued very long and he had no other local treatment. About a year after his attack, after great suffering, he died. Before his death his scrotal contents became distinctly tubercular.

In closing, permit me to present two cases which I saw in consultation—one with Dr. Ray Lyman Wilbur, the other with Dr. Herbert C. Moffitt. These gentlemen have kindly sent the following reports:

Case, G. M. R .- Dr. Ray Lyman Wilbur: "Patient strong, well-nourished man. Had an irritable bladder from boyhood. Operation for appendicitis in 1898. In winter of 1900 began to have trouble with bladder, frequent urination, pain, with pus and albumen in the urine. Greatly relieved by mild urinary antiseptics. First saw him in March, 1901. Symptoms all mild and all referable to the bladder. Pus and albumen in the urine, but no casts. He was treated with various diuretics and urinary antiseptics and hygienic measures, with indifferent success. In the summer of 1901 he was in a San Francisco hospital, and was there treated with argenti nitras injections. Repeated examinations revealed no tubercle bacilli. A cysto-scopic examination, made May 24, 1901, showed sev-eral vesical ulcers. Twice during the summer he had a complete suppression of the urine for 24 hours. In August, 1901, an epididymitis appeared on the left side, and it was taken as confirmatory evidence of genito-urinary tuberculosis, although no bacilli had been found, and all local treatment was stopped.

"September 28, 1901. Consultation with Dr. Chismore and Dr. Krotoszyner. Palliative treatment and strict injunction against surgical procedures.

"In December, 1901, patient went to Baltimore, where he had many relatives, partly for a change and partly for treatment. At that time he was urinating frequently, but had not lost weight.

"On January 4, 1902, numerous tubercle bacilli having appeared in the urine, and there having been an increase in the size of the epididymis, he was operated upon as follows: An epididymectomy on the left side and a castration on the right. The incisions were made high up in the groin, and the vas deferens freed up to the internal ring. Before closing the wound the vas deferens was brought out through the skin at the upper angle of the wound and there left to drain. The object of this was to allow the escape of as much as possible of the tuberculous matter from the vesicles as might flow through the vasa deferentia, and thus divert as much of it as possible from the urethra and bladder. The epididymes were partially involved on both sides, but both testicles were free from disease. The castration was done largely for its atrophying effect.

"The patient rallied from the operation and was better for a short time. Then he began to get worse; the urination became more frequent; there was a decrease in weight and much pain. In March, 1902, he was still fairly strong and vigorous, but was getting

gradually worse. In May, 1902, the frequent urination and the presence of constant pain led to a second operation for suprapubic drainage of the bladder. A small incision was made in the median line of abdomen and the wall of the bladder stitched to it. Through this opening the urine was drawn and the bladder was irrigated. The urine was now heavily charged with albumen, mucus and pus, but had no casts in it. The symptoms were much relieved by the operation, but the patient sank into a septic state, and after two months of fever, vomiting, hiccoughs, etc., died in the latter part of July, 1902.

"An autopsy showed a complete infection of the genito-urinary tract, with almost complete atrophy of one kidney, its place being taken by a sac of pus. There were tubercular foci in the lungs, liver and elsewhere in the body."

Case, Miss C.—Dr. Herbert C. Moffitt: "Saw her first February 24, 1900. Her age was then 24. Never any history of tuberculosis in family. She was absolutely well until six years previously, when there was some pain and difficulty in passing urine. She was at that time in Europe and was said to have malaria. In October, 1898, treated with Dr. Winslow Anderson for some obstinate acne, and had some local bladder treatment for a time, but this was discontinued on account of pain. In January, 1899, inflammation of the left mastoid, but no operation. April 20, 1899, severe bladder pain, called acute cystitis by Dr. Eastman of Berkeley. Since then she has had considerable pain over the bladder and down the left thigh. Paroxysms of pain in the inner and front of the left thigh extremely severe; worse on standing or on exercising. Examined for stone of bladder with negative result, with quite a severe hemorrhage afterward. Bladder was then washed for some time and said to be all right locally, but washing was followed by more pain. An operation was contemplated for resection of the pudic nerve for some reason or other, but was postponed. Of late large hemorrhages with clots. Pain very severe in March, 1900. Examined at Lane Hospital; great irritation of bladder; much pus in urine; very little blood; no evidence of kidney disease, and, after some trials, tubercle bacilli found in the urine by stain, confirmed by animal experiment.

"Attempt to separate urine from either kidney by the Harris segregator gave no result. Ulcers were seen in bladder. Improved somewhat under methyl blue, but some months later relapsed and was seen by Drs. de Vecchi and Chismore, who suggested no operative interference, but hygienic treatment. Since this time she has led an open-air life. The only drugs used have been cod liver oil and occasionally methyl blue. There have been two distinct relapses with hemorrhages and considerable pain, but for long periods she has been able to get around as usual, and has then been at normal weight and free from all but very slight bladder irritation. At present she is in Los Gatos with return of bladder pain and irritation, but is under no treatment beyond cod liver oil

"Additional history, gotten of late, developed the fact that she remembers some indefinite bladder trouble as far back as childhood. Had whooping-cough at four years of age, and a cough two years afterward. Later an abscess in the left ear. Examination of late years always failed to show any lung involvement."

The last session of the University of Pennsylvania appropriated \$25,000 to equip a laboratory for X-ray research and Finsen's light apparatus at the Hospital of the University of Pennsylvania. Dr. Henry K. Pancoast has charge of the work.

OCCIPITO-POSTERIOR POSITIONS*.

By GEO. L. COLE, M. D., Los Angeles.

DURING a somewhat limited practice in obstetrics, derived from a general practice extending over a period of something like sixteen years, there perhaps has been no particular line of cases that has given me so much annoyance as those which have presented themselves in occipito-posterior position.

In looking up the matter in the various textbooks, it has seemed that the literature upon the subject is more meager than the importance of this class of cases deserves. The majority of text-books devote from one to three pages to the subject. One is impressed with the fact that more attention in the classroom, more explicit directions in the text-books, and more thought in general upon the subject, by the young practi-tioner especially, would be the means of putting him in a better position to properly handle these trying cases that so often result in more or less injury to the maternal parts and not infrequently result in death to the new-born. For instance, Lusk, in his most admirable system of midwifery, devotes only one and one-half pages to the subject, but throws a vast amount of light upon the mechanism of rotation in such cases by a quotation (which will be given later on) from Dubois. Carrigues is somewhat more explicit in his handling of the subject, devoting three pages which form a most commendable article upon the sub-

King in his little "Manual of Obstetrics," devotes about three pages to occipito-posterior presentations, and handles the topic very masterfully. He holds that about 96 per cent. of these cases correct themselves by being transformed into occipito-anterior positions before delivery is completed. He furthermore claims that in the remaining 4 per cent. much may be found to aid anterior rotation, especially where an early diagnosis is made. Later on, his expedients to promote anterior rotation will be quoted. Grandin and Jarman, in the third edition of their "Practical Obstetrics," devote about three pages to occipito-posterior positions, and a liberal quotation from them will be made later.

In being called in as consultant in a difficult obstetrical case, it is not of unusual occurrence to find that a long-protracted case, which is about to be terminated with instruments, is due to this faulty position; and it is not of infrequent occurrence that the faulty position has not suggested itself to the attendant. While perhaps up to the time of such consultation no procedure could have resulted in a conversion to an anterior position, yet with a true understanding of the faulty position, the attendant would have been less impatient of delivery and would have given, ordinarily, a more guarded prognosis as to the eventual out-

come. While these cases will possibly often correct, or partially correct, themselves if time be given, it is somewhat questionable as to how much good we can accomplish by interference. The slow advancement of the head; labor usually attended by more than the ordinary amount of pain; necessity for an unusual amount of patience; the frequency with which partial or complete laceration of the perineum occurs; the amount of pressure that is necessarily made upon the cranium of the child by the forceps; and the frequent need for immediate repair of the perineum are points well worthy of consideration. As pointed out by Grandin, "a tedious first stage, characterized by short, nagging pains, is a fairly uniform accompaniment of the instances which should cause anxiety." It is here that a careful manual examination, taking into account later on in the course of labor the exact positions of the two fontanels, should enable us to arrive at a correct diagnosis.

As I have intimated before, the following experiments of Dubois, taken from Lusk, give us a clew to the part played by the perineum in the anterior rotation which not infrequently takes place when an abundance of time is given:

In a woman who had died a short time previous in child-bed, the uterus, which had remained flaccid and of large size, was opened to the cervical orifice, and held by aids in a suitable position above the super-ior strait; the fetus of the women was then placed in the soft and dilated uterine orifice in the right occipito-posterior position. Several pupil-midwives, pushing the fetus from above, readily caused it to enter the cavity of the pelvis; much greater effort was needed to make the head travel over the perineum and clear the vulva; but it was not without astonishment that we saw, in three successive attempts, that when the head had traversed the external genital organs, the occiput had turned to the ternal general organs, the occupant anterior position, while the face had turned to the left and to the rear; in a word, rotation had taken place as in natural labor. We repeated the experiment a fourth time, but as the head cleared the vulva the occiput remained posterior. Then we took a dead-born fetus of the previous night, but of much larger size than the preceding; we placed it in the same conditions as the first, and twice in succession witnessed the head clear the vulva after having executed the movement of rotation. the third and following essays, delivery was accomplished without the occurrence of rotation: thus the movement only ceased after the perineum and vulva had lost the resistance which had made it necessary, or, at least, had been the provoking cause of its ac-

Now, if we accept these experiments of Dubois. together with the statement of King that 96 per cent. of posterior positions correct themselves, are we justified in radically interfering, as Grandin suggests, long before the head reaches the perineum? Here I quote at length from page 418 of the latter's most commendable work:

For the purpose of rotation nothing can take the place of the aseptic hand, aside from the fact that at one and the same time the hand may detect any additional anomaly hitherto unsuspected, such as pelvic deformity, which, aside from being a further

cause of slow or impossible engagement, may alter the field of election at the very best time (from the standpoint of both the woman and the fetus)-that is to say, when the conditions are still favorable for version or some other procedure. When the occiput rotates backward into the hollow of the sacrum, we are face to face with what—there is uniform agreement— constitutes one of the most difficult cases in obstetrics. The clean, educated obstetric hand at the pelvic brim is a source of positive safety to both the mother and child, compared with waiting until exhaustion calls for, for instance, the forceps within the pelvic brim. A tedious first stage, characterized by short, nagging pains, is a fairly-uniform accompaniment of the instances which should cause anxiety. It seems clear that manual examination at this time will often lead to the adoption of a procedure which will alter the prognosis of and lessen the difficulties attendant upon the persistent oblique and sacro-rotated occipital position. This procedure, which has been persistently advocated by the authors, has been much criticized on the ground, first, that internal rotation of this nature is not perma-nent, and, secondly, that, dilatation having been ac-complished and the hand being in the uterus, the wiser plan is to perform podalic version. The first objection falls to the ground in face of the established fact that over and again the maneuver has succeeded. Those who fail simply twist the head. They do not rotate the body. The second objection carries more weight, and when the dystocia is due to the pelvis and not to the fetus its truth is now granted. But, if the size of the fetus added to the malposition is the cause of the tedious labor, it will be found advantageous in all instances except those of emergency to give nature a chance to dilate the pelvic ca-nal, as also to mold the fetal head. It is a sound obstetric rule not to interfere needlessly either by forceps or version.

The following statement by King in his Manual is so pertinent and lucid as to the management of these cases that I cannot do better than quote in full as follows:

Various expedients have been devised to promote anterior rotation of the occiput when it does not occur spontaneously. Thus, since we know posterior rotation is generally the result of imperfect flexion (the forehead being too low, the occiput too high), we may strive to remedy the difficulty by making the flexion perfect. This can be done by pressing two fingers of one hand upon the forehead during the pains so as to push it up, or at least keep it from coming lower, while the force of uterine contraction is then expended in depressing the occiput. A vectis may at the same time be applied over the occiput to assist in pulling it down. The object is to get the occiput so low that it will pass below the spine of the ischium to the anterior inclined plane and rotate forward, while the forehead is kept high enough to pass above the opposite ischial spine and rotate backward. Rotation forward may sometimes be acthe pelvis be large and the operator's hand small, the latter may be passed in alongside of the head, and the occiput drawn obliquely downward and forward to the pubes. Another plan: Etherize to full an-aesthesia. Pass a hand into vagina; grasp head, and steadily and gently push it up out of the pelvis, above superior strait. Then flex it, and rotate occiput for-Hold it so until the pains, aided by pressure of other hand on abdomen, push it down again into pelvis, in its now occipito-anterior position. Forceps may be required to complete the delivery. In conclusion we may say that (1) occipitoposterior presentations are tedious and painful,
and form one of the most disagreeable classes of
obstetrical cases. (2) That an early diagnosis of
the position is desirable. (3) That there is often
a question as to the best method of dealing with
them. (4) Abundant time should be given when
practicable, before applying forceps. (5) In
using the forceps, tractions should be made with
the handles as low as possible and pressure on
the head should be frequently released. (6) The
perineum is frequently, partially or completely
lacerated and should be repaired at once.

DISCUSSION.

Dr. D. A. Hodghead, San Francisco — I am very sorry that Dr. Briggs is not present to open this discussion. This is a very interesting paper, and the question is a very important one, because the condition is extremely difficult to handle. I wish to compliment Dr. Cole upon the excellence of the paper, and to call attention to a few points. First, as regards the first stage of labor. these cases of malpresentation, the first stage is tedious, and I wish to emphasize this fact—the old theory of rigid os, which the obstetricians have talked so much about, except in cases of malignancy, is probably a myth. Bear this in mind, that when you have a tedious first stage, you have a malpresentation. That is the time to determine whether there is a malpresentation or not. If the head is properly presenting, you will not have rigidity of the cervix. As to rotation, we know that the true mechanism of the occipital presentation is extreme flexion, rotation of twofifths of a circle, becoming the occipito-anterior, and then the normal mechanism. There are two rules as to the course of these cases, or as to why this rotation takes place. One is that the body will move in the direction of least resistance and in connection with that, the most dependent portion. We can do part will always rotate to the front. We can do away with the planes of the ischium. They cut very the rotation of the head. The point is to secure extreme flexion by some method; by pressing on the forehead or bringing down the occiput. Now as to interference. I would not allow that to stand in the way too long for these reasons: That too long a continuance of the second stage is dangerous to the mother and to the child by pressure on the head. If you do interfere with the use of forplace them in position just before locking just as in ding the in cens. any but other case. bring them down upon the ments, well and then, before making traction, lift the handles, and improve the flexion. If you can secure the head by means of the forceps you can increase the flexion, and then by making traction, can bring the head firmly down on the perineum. When you remove the instrument the rotation will take place itself. I can remember in the first case I ever had with occipito-posterior position, I did just this thing—pressed the forceps back against the perineum before locking, and then elevated some-what, and brought the head against the floor of the pelvis, then removed the instruments, and the head rotated. This rotation will take place very quickly if you get the flexion extreme and the head down on the perineal floor.

Dr. Z. Malaby, San Francisco—The point that is usually neglected in these cases is abdominal palpation. It should be part of the routine in all cases. I have been instructing the students in the last few years to practice abdominal palpation in all cases.

When you get a case that is going to be one of posterior presentation, if you diagnose it early it is possible to rotate the head before it is engaged.

Dr. Geo. Cole, Los Angeles—Within a day or two before coming here I saw an article on the same subject. In speaking of these cases the writer advised two maneuvers: One was that as soon as the diagnosis was made in the early stage, the patient should remain in genu pectoral position and that the position of the body would often help to a better position, which I think is overdrawn, because I think the change of position takes place—in the early stages, not when the head gets down near the perineum. But as to whether that position is of benefit or not, I am not able to say. The other suggestion was, in applying the forceps put them on in the reversed position; put the convexity to the front. His object in doing that was to make more perfect flexion. The point of the blades were pointed down directly toward the rectum, and while in the hands of a very suitable man this might be tried, yet to my mind it would simply result in injury to the rectum. In many cases we find a position where there is a large roomy pelvis and moderately sized child. Leave them to nature and the application of forceps becomes an easy matter. But where there is a small pelvis and a large child, it is exceedingly difficult.

WAS IT A CASE OF MENINGEAL HEM-ORRHAGE, HYSTERIA OR MALING-FRING?*

By H. J. B. WRIGHT, M. D., San Jose.

To the general practitioner the obscure cases of hysteria and the cases of malingering are often embarrassing and sometimes hurtful. Until the stability of the nervous system is greatly increased and cupidity as greatly decreased, we may expect to find cases of hysteria and malingering. Medicolegal literature contains abundant evidence of the credulity and ignorance of physicians when dealing with hysterical and malingering patients. A study of the following case may assist us in our efforts to learn how to escape from the pitfall of hysteria and the tricks of the malingerer.

It should be known at the outset that the patient is a medical gentleman who has done much surgical work, and who is familiar with the anatomy and physiology of the human body, and is thereby more capable of deceiving his medical attendant than the untutored person would be. There is also a psychological possibility in the case which should not be overlooked. The patient is carrying an accident insurance policy which gives an indemnity of \$100 per week for a period of 102 weeks. Should the disability of the policyholder continue through that period, the accident company will be liable for the sum of \$10,400. The question before us is not whether the company is liable, this being a purely commercial question, but whether the hope of gain has psychologically caused the patient to exaggerate his sufferings without being guilty of intentional wrong.

Fifteen physicians, all gentlemen of ability, have seen this patient, and at least two of the

number have recently expressed themselves as believing the patient was not seriously injured. Of the others, one said: "It is a case of concussion of the brain"; another said: "It is a case of voluntary convulsions," and three said: "It is a case of meningeal hemorrhage," while another said: "It is a case of shock resulting in hysteria, or traumatic hysteria."

The opinions of these medical gentlemen are not to be pooh-poohed, for they are the opinions of men who have much diagnostic ability. Unfortunately, one of these medical gentlemen, who studied the case for several weeks, expressed an opinion which called in question the veracity and honesty of the patient, and incurred the displeasure of the patient's wife, who gave the doctor a public horsewhipping. The patient's family history contains nothing of importance in this connection. The personal history shows a large and varied experience in the affairs of life. He lost a little finger and the corresponding metacarpal bone of the left hand, through a gunshot wound. He had septicemia a few months before the present illness. From this he completely recovered, except that it left the skin of the anterior portions of his chest quite discolored by irregularly deposited pigment. At the time the injury, the effect of which we are to study, was received, he was in the full vigor of manhood, at the age of fifty-nine.

July 8th, 1902. While riding in a rallway coach, with his elbow on the open window sill and his chin in his hand, he cried out that something had struck him and that he was in great pain. A physician, who was near, found a bluish colored, irregular circular spot about one inch in diameter, over the right coronal suture, about three inches below the median line of the head. There was no abrasion, nor did palpation give any evidence of fracture of the skull. A stone the size of a man's fist was found near the patient. At the end of about twenty minutes the patient lost consciousness, and had a number of convulsions, general in character. The comatose condition continued for 36 hours, during which time patient had many convulsions. At the end of 48 hours his mind was clearing, the pupils were dilated and left hemiplegia was discovered.

On the 5th day he had difficulty in speaking, but the nurse's notes do not disclose the nature of the difficulty. The convulsions continued to recur at irregular intervals.

On the 7th day the temperature, which before had been normal, rose to 100 2-10, pulse 74, respiration 27. He complained of pain in right side of head and in right ear. During the convulsions, which were less severe than at first, the facial muscles twitched and froth appeared between the lips.

The notes do not state whether the muscles on the left side of the body were involved in the convulsive movements at that time or not.

On the 8th day the temperature was 100, pulse 66, mind weak.

The 9th day the patient had 33 convulsions. He was always unconscious during these paroxysms.

The 12th day, ophthalmoscopic examination showed normal or slightly pale fundus, nothing wrong with the media, but there was hemiopsia of nasal side of right eye, the vision of left eye being undisturbed.

^{*} Read at the Thirty third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1903.

About this time the nurse says she saw the patient carry his left hand and forearm from under the bedcovering and place it over the abdomen.

August 6th. Temperature 103, leeches applied to

August 8th, 1902, or 20 days after receipt of injury, patient was first seen by the writer. Decubitus dorsal; patient well nourished; skin clear except as above noted; nothing characteristic about facial expression; ideation is impaired; slight appassa: unable to recall anatomical terms with which he was quite familiar before the injury; pupils normal in size and reaction to light. There is absolute loss of vision in nasal one-half of right eye; vision of left eye normal. There appears to be complete loss of voluntary motion of the left upper and lower limbs, which are anesthetic and analgesic. A needle plunged under the left thumb-nail causes no pain; patelar-tendon-reflex exalted on both sides; plantarreflex acute on right side and nil on left side. The convulsions now consist of muscular waves which run over the platysma myoides, the sterno-cloidemastoids and possibly some other muscles of the cervical region, throwing the head forward and somewhat to the left. At the same time the levator-palpebrae superiorii and the occipito-frontalis muscles elevate the brows and upper lids, causing the palpebrai fissures to be peculiarly broadened; the eyeballs are, at the same time, rolled downward. These irregular muscular movements are coincident with loss of consciousness. The seizures last from one to three minutes.

22d day. Temperature 101, pulse 80, respiration 32; today he had clonic convulsions involving the cervical muscles and also those of the right side of the body, while the paralyzed members remained in a These convulsions are peculiar in quiescent state. they are broken by periods of repose which from one-half to two minutes, when the convulsive movement begins again to be soon followed by another period of repose. These convulsive cycles last from five to ten minutes. Today the patient throws himself about in a violent manner, necessitating restraint; cantharidal-vesicant was applied to head and blood soon appeared in urine attended with strangury.

Fourth week. The cervical muscles are not now involved in the convulsions. The temperature today is 101, pulse 100, respiration 16, face pale. During the past two weeks he has voided from 12 to 18 ounces of urine daily, the specific gravity ranging from 1020 to 1028.

August 25th. Today he had spasm of right calf and delirium, the respirations during the seizure run-

ning from 40 to 50 per minute.

August 27th, 1902. Fifth week. The respiratory act was greatly disturbed today. At 3 A. M. the respirations numbered 60 per minute; at 4 A. M. they were 20 per minute; at 5 A. M. they were 16 and at 5:30 A. M. they numbered 60. During the seventh week the temperature, pulse and respiration were about normal. The convulsions are frequently preceded by sensory aura in the right side of head, which is described by the patient as traveling to the ear and immediately thereafter he becomes uncon-Electro muscular reaction is normal in the skeletel muscles of the right lateral one-half of the body. The left deltoid and the left biceps and the left quadriceps extensor respond very slightly to the faradic current. All other muscles of the left lateral one-half of the body are unaffected by this current.

Eighth week. Convulsions recur only at night. The daily secretion of urine rarely exceeds 8 ounces. It is free from blood, sugar, albumen and casts. The spot where the stone is supposed to have struck is hypersensitive. The patient is now able to lift left

elbow until arm stands at right angles to the body. November 24. Has frequent attacks of vertigo and sometimes vomits. The hemiopia has entirely passed away. Patient is pleased to show his improved con-Electro muscular reaction is almost nil in trapezius, latisimus-dorsi, erector-spina-mass flexors and extensors of forearm and hand and the muscles of the leg and foot of the left side. The electro sensory function is present to a slight degree in left arm and left thigh, absent in left forearm, hand, leg and foot; the left ankle is edematous.

February, 1903. Patient is much improved. nocturnal convulsions return at intervals of from three to five nights; they are similar in character to those of the past, coming on generally during sleep and as often passing away without awakening the patient. At the commencement of the attack the patient utters a peculiar cry and immediately has clonic convulsions affecting right lateral one-half of the body and the facial muscles. The convulsive movements of the right side of body being unap-posed by the paralyzed muscles of the left side, the patient frequently throws himself prone, in which position he struggles, moans and occasionally bites The respiratory muscles are implicated, seriously disturbing the respiratory act and the right thumb is drawn into the palm. At the end of a short time (from one-half to three-fourths of a minute), the voluntary muscles become quiescent for one-half minute and then the clonic convulsions begin again. Sometimes the first convulsive attack lasts three minutes, to be followed by half a minute of re-

pose. During all these movements both left ex-tremities remain perfectly limp.

March 3d, 1903. Both the flexors and the exten-sors of the left forearm and hand give electro-reacbut voluntary motion of forearm is almost nil and there is marked wrist drop. Muscles of the left great toe respond slightly to faradic current. The left hand is still anesthetic; there is atrophy of the left spinatus muscles and the left forearm and finger muscles. The left arm measures 11-2 inches less than the right arm. To prevent this atrophy, the faradic current and massage have been used during the last five months. The left ankle is now quite edematous and the finger and toe nails are yellow, rough, ridged and brittle. The mind is clear. He still insists that he will soon be down town on his crutches. He still has nocturnal convulsions.

In differentiating this case, the following summary may be useful:

First—A man of fifty-nine years of age, in the full vigor of an active and successful life, claims he has been hit on his head; a stone is found near his body in the railway coach and his scalp is contused. Second-At the end of twenty minutes he becomes comatose and has clonic convulsions Third-Thirty-six of all the skelatel muscles. hours thereafter consciousness is regained, but convulsions continue to recur at intervals of from one to two hours; marked impairment of ideation with slight aphasia. Fourth-Right monocular nasal hemiopia, which passes away after thirty days. Fifth-Left hemiplegia with recurring epileptiform convulsions affecting right side only. Sixth-Nurse states patient was seen to carry paralyzed hand and forearm about quite freely during sleep. Seventh-Temperature is above normal much of the time for a period of

six weeks. Eighth—Respiration often very irregular and pulse often abnormally slow. Ninth—Urine fourteen to eighteen ounces daily during several months. Ten—Anesthesia and analgesia in left half of body except face. Eleventh—While right side of skeletal muscles is convulsed, the left side remains motionless; patient often passes from sleep into fit. Twelfth—Plantar reflex acute in right foot, nil in left foot. Thirteenth—Electromuscular reaction normal on right side, nil on left. Fourteenth—Patient expresses a strong desire to recover.

The diagnosis of "voluntary convulsions" is absolutely untenable, for the convulsions recur during sleep while volition is in abeyance. It should be said in justice to the physician who made such a diagnosis that he has not seen the patient since the convulsions recur only at night during sleep.

That the case presents many of the manifestations of hysteria is quite true; for instance, clonic convulsions of the skeletal muscles on right side, while those on left side are flaccid; monocular hemianopsia without opthalmoscopic evidence of retinal disturbance, and fits lasting for several minutes, broken by periods of repose. But the diagnosis of hysteria is as untenable as that of voluntary convulsions, for the paralyzed muscles have lost their power of electrical reaction. In hysteria the muscles react normally to the faradic current. We still have the statement of the nurse that she saw patient carry his unaided hand to his head on three occasions during sleep. If the patient did this muscular feat during sleep, he could do it when awake, and such an act would be absolutely fatal to any theory in the case, except that of malingering.

Keeping in mind the physiologic and pathologic facts described, we are compelled to say that the nurse has discredited herself and she is not a competent witness—she has certified to a movement which was not made, the patient did not carry his hand to his head, because the nervous connection between the volitional center and the muscles of the left forearm was broken. The diagnosis is not difficult to arrive at. It is a case of endocranial hemorrhage.

Thanks to a host of able investigators who have done so much in cerebral localization, the pathology of this case can be determined by a study of the symptoms. The mariner's compass points to the north with no more certainty than motor paralysis of the left forearm and hand point to that portion of the certical surface of the right hemisphere near the longitudinal sinus, along the fissure of Rolando. The lesion is hemorrhagic, for it developed some minutes after the head was struck; it involves the cortex, because it causes convulsions as well as paralysis; it is in the upper and middle Rolandic regions. Ablood clot formed

anterior to the optic commissure and pressed upon the outer side of the right optic nerve, causing loss of sight in the left half of the right eye. This pressure has been removed by absorption, as is evidenced by the present condition of the right eye.

The treatment of the case has been much too conservative. The splendid results of surgical work in meningeal hemorrhage during the last ten years have taught the advisability of prompt action in these cases.

The skull should have been trephined and an effort made to remove the clot. Such a course was offered to the patient, but he rejected it, preferring rather to depend on nature's efforts to repair the damage. Those physicians who thought he was not seriously injured and believed he was malingering thought they saw in his refusal to be operated on evidence of the fact that the patient was playing a part and that he knew an operation was not needed.

DISCUSSION.

Dr. H. G. Brainerd, Los Angeles—This paper is particularly difficult to discuss, but it seems to me that the doctor's diagnosis does not cover all the points. How to explain a left hemoplegia from a cerebral lesion which produces motor paralysis is difficult to explain. It would seem that there was a great mixture of organic lesion with hysterical symptoms. I do not know any anatomical or physiological means of producing a left anesthesia and degeneration of muscles of the left side in the manner suggested.

Dr. MacBride, Pasadena—There is one characteristic thing in these cases of dural hemorrhage; that is, rather irregular distribution of the paralysis. dura is supplied by the anterior and middle meningeal A lesion of the dura to produce convulsions must involve the inner surface of the dura. Sometimes we have these irregular dural convulsions caused by spicula of bone; sometimes by external hemorrhage, but, of course, pressure on the cord producing irregular convulsions must be considered in order to do this. As a rule dural convulsions are due to subdural hemorrhage. There is only one lesion that can do this. That is subdural hemorrhage by spicula of bone. There must have been some injury at the base of the brain. There have been a few cases reported in which with very minute cortical lesions independent of traumatisms there has been marked atrophy on the opposite side. The treatment was too conservative. I think brain surgery has shown brilliant results. The operations for tumors, abscesses, or cysts have not shown the brilliant results that trephining has. Dr. Starr in New York showed me a patient who had a hemorrhage on the left side with complete paralysis. He had subdural hemorrhage. Operated on about three weeks after and took out a large clot and the patient completely recovered. If this man were let alone he might have recovered, but ultimately when the clot had absorbed and the cicatrix contracted, he might have had paralysis. The atrophy on the left side would probably indicate some lesion on the left side and the same thing might produce the anesthesia.

Dr. William Franklin Barbat, secretary of the San Francisco County Medical Society, was married on January 23d to Miss Emilie M. Kane,

GRAWITZ TUMOR OF KIDNEY.*

By E. O. JELLINEK, M. D. (Vienna), Chief Physician Medical Department German Hospital, San Francisco.

F I take the liberty to report to you two cases of strumae lipomatodes aberratae renis, or Grawitz's tumors, I do so because these tumors are little known to the practicing physician in spite of their frequent occurrence, and also because they are of great importance for therapeutics and prognosis. Without desiring to enter upon the controversies which in 1883 followed Grawitz's publication concerning the source or origin of these tumors, since it would be too digressive from our subject, I should like to present to you briefly the theory which at present has been

accepted almost universally.

These tumors, of the size of a pea to that of a cherry, rarely assume larger dimensions; they lie isolated or in large numbers in the medullary substance of the kidney and are always incapsulated. A section shows them to be of a whitish gray color, sometimes reddish-brown from profuse vascularization or hemorrhages in the tissue; they remind us of medullary cancers or sarcomata, especially since they are soft and fragile. In structure they are highly adipose, for which reason formerly they were frequently termed lipomata of the kidney, a kind of tumor which occurs in the kidney, but is extremely rare compared to Grawitz's tumors. They have no fat-cells, but rather fat globules arranged in large polygonal or cubic cells, either in groups or in tubules and surrounded by a delicate homogeneous or fine fibrillary areolar tissue. Numerous blood vessels course in this tissue. The fat can be extracted easily by means of ether or alcohol. The interstitial tissue of these nodules is connected with the interstitial tissue of the medullary substance of the kidney. On the other hand, the cellular groups described above, as well as the tubules, are foundations of their own kind and are separated by a capsule from the medullary substance of the kidney. At the outermost part of this capsule terminate the uriniferous tubules, which are more or less in a state of degeneration. I mention this fact especially for the purpose of emphasizing that these tumors have nothing in common with the genuine renal adenomata which originate from the epithelium of the uriniferous tubules. These nodules abound in lecithin and correspond thereby, as well as by their histological structure, to the suprarenal capsule and those nodose tissues which are found in the suprarenal capsule and are termed strumae lipomatodes suprarenales.

Grawitz in a very critical manner showed in the before-mentioned treatise that these renal tumors originate from scattered particles of the suprarenal capsule. In a fetus of two to three months' growth the suprarenal capsule, as the larger organ, surrounds nearly the entire con-

vexity of the kidney, separated from it only by a thin cellular layer—the subsequent renal capsule. Dispersed particles of the suprarenal capsule which, by the way, as small yellow spots frequently form an occasional condition in a postmortem, may be deposited not only on the renal surface, but can penetrate more or less deeply between two reniculi or lobuli of the kidney, which at this fetal stage of the kidney have not yet coalesced. If subsequently these reniculi press close to one another until they become completely coalesced, these dispersed particles remain deeply embedded in the medullary substance of the kidney. In case these dispersed particles of the suprarenal capsule from some cause or other, unknown to us, begin to proliferate they form that kind of tumor which bears the structure of the suprarenal capsule, termed, briefly, Grawitz's struma of the suprarenal capsule, or hypernephroma renis. In and of themselves these tumors appear to be benign and may be found as an occasional post-mortem appearance without having caused any symptoms during life. On the other hand, by multiplicity and size, they can cause the symptoms of renal tumors, namely, pain, hemorrhage anemia, etc.; finally they can degenerate into carcinomata or saromata, a fact which, for pathology of renal tumors, seems in my opinion to be of the greatest importance and on which I shall dwell more fully in the description of the two cases recently observed by me.

Case I .- On January 16, 1902, I was called to attend Mr. A. D., who complained of violent colicky pain in the right lumbar region, which radiated toward the region of the bladder, the penis and the testicles. taking his history I learned that the patient claimed to have been in perfect health, except for the last two years, and was able to attend perfectly well to his business, that of a merchant. For five or six years, he says, he felt a slight pain in the right side: still at no time had it been so great as to cause any inconvenience to him; he believes he felt this pain for the first time after a race which he ran and from which he fainted. Two years ago one evening, in a state of the best health, he had a sudden attack of violent pain in the right side. A physician, who was summoned, declared it to be nephritic colic in consequence of renal calculi; he cut short the attack by a subcutaneous injection of morphin. These attacks recurred from time to time, and during them, as wel! as during the intervals free from pain, blood is said to have been voided with the urine. Also urgent desire to urinate and pain in the bladder existed. During the last two years the patient began to lose weight; his general condition grew so bad that he had to neglect his business more and more. According to the diagnosis, therapy was directed to nephrolithiasis. On examination I found the following: The patient, 43 years old, descended from a healthy family; no lues; of medium size and corresponding bone structure; flabby muscular system; scanty panniculus adiposus; skin and mucous membranes extremely pale, of a slight ictero-cachexic color; strabismus divergent, cranial nerves otherwise normal; no enlargement of the lymphatic glands, no edema; cardiac dimensions normal; above the apex a faint whizzing murmur, which increases in intensity towards the pul-

^{*} Read before San Francisco County Medical Society, October 8, 1993.

monalis (anemic murmur); percussion and auscultation of the left lung normal; on the right the full pulmonic resonance extends anteriorly as far as the upper border of the fifth rib, posteriorly as far as the tenth spinal process; pulmonary borders are easily displaceable during respiration; normal on auscultan. The abdomen is largely convex over the niveau the thorax; the right half of the epigas-um and the right hypochondrium as far trium and as the umbilical line are decidedly prominent. The entire abdominal wall shows distended collateral veins extending toward the lower thoracic half. On percussion the hepatic dimension be-gins at the superior border of the fifth rib and extends in the parasternal line as far as about three fingers' breadth above the umbilicus; in the nipple line, as far as the eminence of the umbilicus. On palpation a tumor with a heavy border is felt extending in the parasternal line as far as about three fingers above the umbilicus, thence in a light convex arch downward toward the nipple line as far as the eminence of the umbilicus, from where it descends rather abruptly toward the anterior axillary line as far as the neighborhood of the superior spine. On palpation this steep descending portion appears to be much heavier and arches anteriorly toward the lumbar region so that the impression is created that it is not a case of hepatic tumor, although the respiratory displacement of both parts is the same, and the stomach as well as the intestinal distention do not vary from the normal on percussion as well as on palpation. The right lumbar region toward the spinal column presents diminished resonance.

An Ewald breakfast administered on the following morning to test stomachal digestion was syphoned out after an hour, and on examination gave the following chemical and microscopical results: abundant free hydrochloric acid; no lactic acid; no Oppler-Boas bacilli; presence of sarcine. On percussion the spleen appeared to be enlarged, but could not be palpated. Red blood corpuscles, 3,200,000; leukocytes, 11,000; hemoglobin, 46 per cent.; urine, quantity in twenty-four hours, 1,900 cc.; sp. gr., 1,027. Traces of serum-albumin; no sugar; indican pronounced; no Diazo. On microscopical examination, abundant leukocytes, scanty red blood corpuscles and pavement epithelium; no tube casts. (Not examined for uric acid.) Diag-

nosis: Tumor renis dextri et hepatis.

On January 23rd the patient had another very violent attack of pain which was localized over the entire abdomen and radiated toward the bladder and the glands penis; frequent urgent desire to urinate; voiding of urine painful. The quantity of urine tested had a sp. gr. of 1,028, was of a red brown color and contained several floating particles, some as large as one cm., and of the thickness of tissue paper. At the sight of these I suspected at first echinococcus, but the microscopical examination of the fresh as well as the stained particles revealed no characteristic morphological elements; on the contrary, these particles, as well as others evacuated subsequently, showed only very few isolated cells, the structure of which could not be recognized. After that, and subsequent to the attacks of pain now recurring more frequently, but also during the intervals free from pain, there appeared in the urine coagula presenting detritic ramifications which placed their source and origin from the kidney beyond all doubt.

For diagnosis I was confronted by the following differential diagnostic doubts and difficulties: It could be a case of echinococcus of the liver with perforation of the kidney, for the evacuated particles were evidently very suggestive of this supposition; perhaps less probable, it could be a

case of primary echinococcus of the kidney which had invaded the liver; or a renal tumor of a different kind which had invaded the liver, and with reference to the latter hypothesis I suspected first of all a Grawitz tumor for reasons which I shall state afterwards.

Entirely independent and without knowing that patient was treated by me, Dr. Moffit, whom the patient consulted on my advice, had arrived at the same diagnostic doubts and difficulties, only Dr. Moffit was more inclined to the diagnosis of a Grawitz tumor, while I rather considered it to be echinococcus. Since, in consequence of repeated microscopic examinations of the discharged particles no morphological elements indicating echinococcus had been found by Drs. Moffit, Ophüls or myself, I adopted Dr. Moffit's diagnosis and informed Prof. Czerny in Heidelberg-by whom the patient was to be operated—of our diagnosis as Grawitz tumor.

Patient was operated upon in the beginning of May, and Prof.Czerny was kind enough to inform me in a few lines about the condition and result of the operation. With exceedingly great difficulties and profuse hemorrhage a renal tumor of the size of a man's head was removed. The tumor was firmly coalesced with the inferior surface of the liver and had grown in the form of a cone into the vena cava. Prof. Czerny stated in his report "he hoped to be able to send patient alive to San Francisco, but he could not guarantee for him a long life." The mass proved to be a Grawitz tumor. After convalescence, retarded by venous thrombosis of the right femoral with subsequent sepsis, patient arrived here in October, 1902. At that time I was compelled to diagnose a carcinoma of the tenth and eleventh dorsal segment of the spinal column, of which patient died in a most pitiful condition on January 31, 1903, at the German Hospital. I am sorry to say we were not permitted to make a post-mortem exami-

Case II .- Mr. A. W. was received in the German Hospital on June 6, 1903. Patient is 55 years old, complains of loss of weight, weakness and discharge of blood with the urine. No hereditary trouble, no lues. Patient drinks beer moderately, but smokes a great deal. In childhood and youth he was always in good health; had the measles at the age of twenty-five and mumps at the age of thirty-one, but recovered entirely. Two years ago he suffered from attacks of syncope, which since then have not recurred. About a year ago patient noticed discharge of blood with the urine which continued for a week. A month later the discharge of blood recurred only more profusely. Patient was confined to his bed for three weeks more In December, 1902, hematuria recurred, this time with conditions of irritation of the bladder and pain which radiated toward the penis; he said also that he had chills and fever, as well as sweats for about two weeks. His present attack began on June 1, 1903, without any fever or pain. During the time of the disease, that is to say, during the last year, the patient lost 45 lbs.

Status on June 6, 1903: Man, tall, of vigorous bone structure, muscular system well developed, but flabby; moderate panniculus adiposus; weight, 146 lbs. Skin and mucous membranes pale; no edema. Percussion and auscultation show the heart and lungs normal. Abdomen not prominent, not sensitive pressure; duliness of liver at the upper border of the sixth rib; lower border at the costal arch; liver just palpable and not sensitive to pressure. D ness of spieen normal, but not palpable. the right lumbar region a tumor can be Dullpalconveys the which impression of right lateral floating kidney. This tumor extends in the anterior axillary line as far as about four fingers' breadth below the costal arch and is displaceable on respiration. There is dullness posteriorly in the right renal region as far as the spinal column; compared to the left side the duliness of the right kidney is about twice as great or even more. The surface of the tumor appears to be smooth, and is sensitive, but not painful when palpated. Urine sp. gr., 1.020, of neutral reaction. Color of urine is reddish, largely mixed with blood. The precipitate presents clot-like detritic ramified coagula, which remind one of the detrital tissues of bronchitis fibrinosa. Traces of albumin; no sugar; no Diazo. On microscopical examination, abundant red blood corpuscles; isolated leukocytes; no tube casts.

Diagnosis: tumor renis, probably Grawitz. Cystoscopic examination, catheterization of ureters made by Dr. Krotoszyner after subcutaneous injection of phloridzin, and kryoscopy gave the following results:

Right kidney, kryoscopy, 1.3; phloridzin, 0.25%,

Right kidney, kryoscopy, 1.3; phloridzin, 0.25%, sugar; on microscopical examination, red blood corpuscles en masse; leukocytes; round epithelium.

Left kidney, kryoscopy, 1.2; phloridzin, 1.28% sugar; by microscopical examination, numerous red blood corpuscles and pus. (The urine of the left kidney was caught from the bladder, while the catheter remained in situ in the right ureter.) Kryoscopy of the blood, 0.48; normal, 0.56. At the end of our examinations, and having ascertained that the left kidney in all probability was performing well its function, I requested Dr. Weil to extirpate the kidney, which operation was made on June 22, 1903.

Incision parallel to twelfth rib. After separating perirenal fat it is found that the kidney is of more than double its normal size. Capsule extensively adherent; the adhesions separated under considerable oozing. Kidney extends high up under the ribs and can be luxated only after dissection of twelfth rib. The tumor extends towards the hilus. Ligature of vessels and ureter. Cavity loosely packed with gauze; wound closed about two-thirds; healing rapidly by granulation.

Patient voided during the first twelve hours after the operation about 400 cc. of urine, which did not essentially differ from that before described. Isolated blood corpuscles can be found in the urine to the present day, and I am in doubt whether they originate from the left kidney, or, as seems more probable, whether a cone of the tumor—as you will see in the preparation—projects into the pelvis of the kidney and has pentetrated the right ureter, a fact which would essentially aggravate the prognosis. Otherwise patient had an undisturbed convalescence; his weight until September 8th has increased about 16 lbs.; he takes frequent walks.

After the description of the two cases, in which the diagnosis of a renal tumor was out of the question, I feel it is my duty to state to you the reasons which induce me to make the probable diagnosis of a Grawitz tumor. I also should like

to discuss the question whether the diagnosis of a Grawitz tumor without an explorative incision can be made in any case with some probability.

(To be continued.)

THE NECESSITY FOR THE SYSTEM-ATIC ANNUAL EXAMINATION OF SCHOOL CHILDREN'S EYES, EARS, NOSES AND THROATS BY SCHOOL TEACHERS. INCLUDING A REPLY TO PROFESSOR LESLIE'S LEAFLET.

By FRANK ALLPORT, M. D., Chicago, Ill., Prof. Clinical Ophthalmology and Otology, Northwestern University Medical School, Etc., Etc.

NASMUCH as some of the local and State Boards of Health and Education on the Pacific slope are about to take decisive action on the annual and systematic examination of school children's eyes, ears, etc., by school teachers, I have been requested by some members of the California profession to say something on the subject for the California State Journal of Medicine that will set forth the needs for the work and the best and most practical method for its accomplishment. This, then, must be my excuse for reappearing in print once more in connection with a subject upon which I have written so much.

Since writing this paper my attention has been called to an article appearing in the CALIFORNIA STATE JOURNAL OF MEDICINE for December, 1903, and January, 1904. It is written by Professor George L. Leslie of the Los Angeles High School, and was designed as a "leaflet" to be distributed amongst the teachers of Los Angeles. I am delighted that a man as erudite and eminent as Prof. Leslie has become sufficiently interested in these tests to become an active worker in the cause. I fear, however, that his leaflet, while doubtless simple enough to himself, is so ultrascientific, complex and profound, as to be absolutely incomprehensible to the average teacher, and that discouragement will follow its perusal, together with a virtual abandonment of the tests. I have spent more time in simplifying my plan of examination, together with instructions to teachers, than I ever did in their original construction, and yet teachers complain of the scheme as too complicated, until its utter simplicity has received a demonstration. My imagination fails to conceive of their feelings when Prof. Leslie's leaflet is submitted for their inspection. I believe that much of the matter in the leaflet would require careful study by the average oculist to insure its entire comprehension. I therefore feel that it must be beyond the grasp of people who have not received a careful medical education. I am satisfied from a somewhat extensive experience in

such matters that the role assigned to teachers by Prof. Leslie in his leaflet is altogether too arduous and extensive, and when it comes to testing for muscular imbalance and diagnosing refractive and other errors, the matter simply becomes utterly impracticable and impossible, because teachers cannot and will not do it. advice, therefore, is to submit to teachers a plan of examination that is perfectly plain and simple and yet efficient, and one that involves but little time and labor, believing that this is the only plan through which real utility may be expected. I beg leave to mention also that in Prof. Leslie's leaflet no mention is made of ear, nose or throat defects, an omission which would be most unfortunate for the entire success of the scheme. I wish again to express my delight at the interest in the matter evidenced by Prof. Leslie, and I sincerely trust that more educators may follow his leading in agitating this most important subject. My only criticism of his article is that his ideas go too far, and set a standard so high as to be beyond the reach of the average teacher.

Dr. Allport's Paper, Referred to Above.

There are in the United States over fifteen million school children, ten million of whom are suffering from some eye, ear, nose or throat defect, which if relieved will place them in a much better condition to undergo life's struggles, and to achieve a measurable degree of that success which produces selfrespecting citizenship, and relieves the state, county or town of burdensome pauperism. No flight of fancy is required to transform the defective child into the non-supporting "ne'er do well," the wandering and menacing tramp, or the idle, pleasure seeking, and misery-finding prostitute. The evolution is natural and consequential, and stands as an enduring monument to the benignity of education. A child whose educational progress is embarrassed or almost stopped by reason of physical defects may soon acquire a loathing for education and all that education represents, and the seeds of idleness and irresponsibility thus being sown may, unless energetically and tactfully controlled, either by parental or surrounding influences, fructify and produce a personality ripe for sinister inoculation. If, therefore, the State can eliminate, control or mitigate the existence of such physical defects in children, and by its parental supervision place such children in a position of reasonable equality with their healthy companions, thus affording them fair opportunities for educational progress, its duties become unmistakably clear, and its investment of public funds for the consummation of such designs, a laudable measure of unquestionable economics. If the direct causes of criminality and pauperism could be accurately ascertained, I will venture the opinion that the prevailing etiological factors would be physical defectiveness and social surroundings. If, therefore, either of these can be even materially mitigated, a distinct impression would be made upon the criminal and pauper annals, and the problem would become one to be worthily considered by the economist, philanthropist and sociol-The improving of either physical defects or social surroundings in adult life, is a problem of almost hopeless perplexity, while if these foes to social prosperity be attacked in the budding periods of hu-

man existence, the difficulties are immeasurably mitigated

Concerning the last of these mundane misfortunes, or the social surroundings of individuals, this paper will have nothing to say, but as a medical man I am intensely interested in the second proposition referring to physical defectiveness, and I sincerely believe that if the relievable bodily abnormalities of children could be eliminated, a mighty factor encouraging idleness, poverty, and crime, to say nothing of human suffering, would be driven forcefully to obscurity.

"Prevention is better than cure" is an old adage, and is nowhere more truthfully exemplified than in the subject under consideration. The adage might be somewhat altered to read, "Prevention is possible a thousand times, while cure is possible but once," and still not stray very far from the truth. So true is this that almost all great reform and philanthropical movements tending toward the physical, mental, moral and sociological uplift of humanity, are surely and inevitably endeavoring to grapple with the subject in the earliest years of childhood, before the withering and decadent breath of human degeneration has rendered upward and improving conditions well nigh impossible.

Perhaps nothing more surely indicates the nobility and unselfishness of the medical profession than its recognition of these principles, and its beneficent work in the direction of preventive hygiene and medicine. Its best efforts are directed toward the elimination of disease, thus presenting the only instance in professional or commercial life where strenuous endeavors are made to destroy one's own income. While it would be most interesting and instructive to dwell upon the various bodily infirmities of children that militate against their intellectual, moral and sociological advancement, the space allotted for this paper is all too short to permit of such a digression. The title of my paper indicates that I am to write upon those ocular and aural defects which deter or prevent the afflicted child from acquiring those educational advantages which properly equip him for the great battle of life, the struggle for existence

Come with me to the clinic and see a poor child of perhaps some foreign extraction. Notice its attenuated form, its pinched countenance, its bloodless, illy-nourished appearance, its unintelligent, sponsive aspect, all indicating insufficient nutrition before and after birth, and general lack of proper food, air, care and hygiene during the brief span of its miserable existence. Examine its eyes with your find myopia or hypermetropia of enormous degrees, test-types and ophthalmoscope, and you will perhaps or a congenital cataract, either doubtless due to pre- and post-natal starvation, and general neglect. Place this child in a school where physical defects are unrecognized, and watch the results. He is unable to see distinctly, and headaches, pain and general discomfort follow all his efforts to study. He cannot see the blackboards and charts; printed books are indistinct or seen with much effort; the faces of his teacher and comrades are blurred; he does not know what is the matter, but he finds it impossible to keep pace with his fellows, and he acquires a hatred for school; his endeavor to acquire an education becomes abortive, he falls behind his class, becomes discouraged and truant, and finally gives up the effort, joins the ranks of street gamins, develops criminal tendencies, is sent to a reformatory that does not reform, and may easily end his life in the penitentiary or on the gallows.

Pass from this defrauded child to another of similar miserable appearance, but with an unusually stupid countenance produced from enlarged tonsils

or adenoid tumors in the throat, which prevent proper nasal breathing, and cause him to keep his mouth open in order to breathe. Eventually he becomes deaf through obstructive and catarrhal influences or on account of chronic middle ear suppuration, which is an actual and constant menace to his life. general open-mouthed, unintelligent countenance, coupled with his deafness, lead him to be considered stupid, if not idiotic, an impression which is daily strengthened by his poor educational progress, impossible to overcome, through his unfortunate physical infirmities. Eventually he, likewise, neglects his studies, hates his school, becomes a street habitue. idle and dissipated, and may easily terminate his existence amid crime and its consequences. These are no fancy pictures which I have painted in lurid hues for the delectation of the reader to point the moral of my theme. They are true, living, breathing, pulsating facts that must be familiar to every student of hygiene, criminology or sociology. If education is worth anything in the broadest sense, and if it passes beyond the borders of dilettanteism, into the broad realms of those influences which stand for human uplift, then it should reach down, down to the very dregs and bottom of the social scale, and pull up the most unfortunate of the human race, and place them on a par with their fellow-men. We all know that education will perform this great evolutionary process, and I claim that it is the inalienable, inborn right of every citizen of this great, magnificent republic to be placed in a position where an education may be acquired. I also claim that inasmuch as we must look to education to solve many of the criminological and sociological problems of the day, and that the more knowledge is diffused throughout the length and breadth of this land the happier and better will the land become; that it is the distinct, moral and economic duty of the State to see that educational advantages are afforded wherever such conditions are in any wise possible. I further believe that wherever obstructions exist, blocking the way toward educational acquirements, they should, as far as possible, be dissipated by those guardians of the public welfare having such matters in charge. I believe that public school officials should maintain a strict surveillance over the physical as well as over the intellectual and moral welfare of those children committed to their charge. A large portion of a child's life is spent in school, and teachers should, and I believe do, take a sincere and watchful interest in the bodily condition of their pupils. The necessity of such observation is the more accentuated, because a large proportion of these children come from homes of ignorance, filth and vice, where mothers and fathers apparently care but little for their offspring, and evidently desire to shirk all possible moral responsibility. Under such circumstances the burden should fall upon the shoulders of the State authorities, both medical and educational, whose best endeavors should be taxed in vicariously officiating as both father and mother to see those poor unfortunates whose earthly advent has been signalized by distress from birth to older years.

While it is not my intention to unduly magnify or exaggerate the importance of any particular physical defect, and its baneful influence in hindering educational acquirements, I believe it safe and conservative to declare that aside from mental capacity, nothing is so essential to intellectual progress as sight and hearing, and of these the former must claim the principal position.

It is, therefore, to these two functions of special sense that particular reference will be made in this paper, and while I will not burden the reader with a large and formidable array of statistical truths that

are now so well understood as to render recapitulation unnecessary, I will trespass upon the readers' time and patience for a brief space in order to clarify in their minds, and in the minds of others, the history and motives for the tests, a detailed description of which will be given toward the close of this article

The examination of school children's eyes by regularly appointed ophthalmologists is no novelty. It has been done many times by numerous workers, and conspicuously by Cohn of Germany, and Risley of Philadelphia. The plan of ocular inspection by of Philadelphia. The plan of ocular inspection by ophthalmologists, however, while ideal in theory, possesses the disadvantages of the great and unnecessary expenditure of public funds, and the inevitable production of much professional friction. Concerning the first objection: It must be apparent that competent medical men could hardly devote such large amounts of time to annual investigations of this nature, which would practically consume the time of several men in large cities, without at least some compensation, which would necessarily add materially to the school budget; and certainly incompetent men would be undesirable. Relating to the second objection bearing upon the production of professional disturbances and friction: Should one or several ophthalmologists be selected to personally examine all the public school children in a given city, it can only be said that such conditions would be but natural and human. The power thus placed in the hands of one man, or several men, would be enormous, and the opportunities for personal aggrandizement and gain, professionally and financially, so great that but few men could successfully withstand the temptation. It seems unnecessary to dwell at length upon this point, but to physicians who understand such matters throughout their devious and diverging pathways, the objections to the plan of personal in-spection of all scholars by practicing physicians seems almost insurmountable. I, therefore, February 6th, 1895, in a paper read before the Minnesota Academy of Medicine, proposed a plan for the annual systematic examination of school children's eyes by school teachers, which was shortly after placed in operation in the public schools in Minneapolis, St. Paul and other Minnesota cities. December 30th, 1897, I read a paper before the Associated Minnesota School Boards in St. Paul, in which I proposed not only that the eyes of school children should be annually examined by school teachers, but that the ear, nose and throat should be also examined through the agency of a few simple, pointed and pregnant questions and observations. This paper was supplemented by another which I read April 9th, 1898, before the Chicago Teachers' Club, in which I introduced a new testing card, combining in convenient form not only the Snellen test letter, but also minute and explicit directions to teachers, as to how the tests may be made. The salient features of the test are that they shall be systematically performed each fall by school teachers. I say "systematically" performed because they should be made as regularly as any other school function, as otherwise their efficacy is almost lost. Many teachers imagine themselves to be enacting their complete duty when they maintain a general supervision over their pupils' ocular and aural condi-tions, observe palpable defects and occasionally refer their pupils to certain medical advisers. This is good as far as it goes, but it is totally inadequate as a substitute for carefully arranged questions that, when answered, will disclose the existence of 90 per cent. of serious eye, ear, nose and throat diseases. The occasional superficial and unsystematic observation of pupils' eyes and ears cannot be safely substituted for thorough, stereotyped tests that have been thoughtfully and intelligently framed for the detection of disease; and yet many ignorant but well-meaning teachers feel that comprehensive annual tests are entirely unnecessary, forgetting the fact that while conspicuous departures from health may be evident to a casual observer, many serious but hidden conditions are only detected by minute and careful examinations. Besides this, unless the tests are distinctly expected from each teacher, many children will thoughtful observation of even the most limited character, for while most teachers take a deep interest in their scholars, and conscientiously endeavor to promote their interests in every way, intellectually, morally and physically, still teachers are frequently seen who regard their profession lightly, and endeavor to get through each day's work with as little personal effort as possible. Under such circumstances it is certainly too much to expect that much time will be given to the investigation of the physical condition of pupils, and the child is, therefore, nearly as much neglected, or subjected to nearly the same degree of lack of intelligent supervision, as can be found in many of the squalid homes of public school children. The tests, therefore, should be uniform and systematic, and should annually include all pupils above the first grade, as it has been found impossible to satisfactorily examine quite young children. Some teachers have the impression that a child needs only one examination, but inasmuch as eye, ear, nose and throat diseases may develop from year to year in previously perfectly healthy children, it is essential that each annual test should include all children above the first grade. The tests should be made early in the fall of the year, and should become an integral part of the regular school curriculum. By making the tests shortly after the opening of the fall term, the physical condition of pupils is early ascertained, and steps can be taken tending toward the correction of any existing abnormalities. parents be warned of the presence of physical defects in their children, and fail to act upon such warning, the teacher will have ample opportunity to counsel child and parent concerning the necessity of a medical consultation, which would hardly be possible if the tests are postponed until toward the close of school, in the spring of the year. Besides this, the fall tests will have the advantage of enabling the teacher to co-operate with the physician in the execution of his advice, and to observe the results of treatment in the afflicted children.

Some objections have been raised to the examinations being made by school teachers, some feeling that parents would object, others that teachers are incompetent, and still others that it is an unjust tax upon the time and energy of the teachers. Concerning the first of these objections: Its triviality is almost sufficient for its dismissal, and it need only be said that the tests are absolutely harmless and painless, that no instruments or appliances are used, and that the child is practically not even touched during the examinations. Should any child or parent object, however, acquiescence to their wishes should be observed, as compulsion is undesirable, and clashing with parental authority should always, if possible, be avoided. Concerning the incompetency of teachers: I have only to say that any one who is competent to be a teacher can make the tests with perfect ease. They are absolutely simple and uncomplicated, consisting of such questions as, "Does the pupil habitu-ally suffer from inflamed lids or eyes?" "Is the pupil probably 'cross-eyed'?" "Does the pupil fail to read a majority of the letters in the number XX (20) line of the Snellen's Test Types with either eye?" "Does matter (pus) or a foul odor proceed from either ear?" "Does the pupil fail to hear an ordinary voice at

twenty feet in a quiet room?" etc., etc. The ascertaining of simple facts of this nature does not require a medical education, and can be easily compassed by any one of ordinary intelligence and tact, and strange as it may appear, correct replies to the questions specified in the examination instructions will disclose the existence of at least 90 per cent. of serious eye, ear, nose and throat diseases. For instance, the question, "Does the pupil fail to read a majority of the letters in the number XX (20) line of the Snellen's Test Types, with either eye?" will disclose the existence of myopia, and many cases of hypermetropia and astigmatism. It will also detect cataract, corneal opacities, optic neuritis and atrophy, many diseases of the vitreous, retina and choroid, etc., etc. The question, "Does the pupil habitually suffer from inflamed lids or eyes?" will detect inflammatory diseases of the cornea, conjunctiva, lids, sclera, iris, The question, "Does the pupil fail to hear an ordinary voice at twenty feet in a quiet room?" detects all forms of deafness, whether due to earwax, catarrh, labyrinthine, or middle ear disease, etc. The question, "Is the pupil an habitual mouthbreather?" discloses turbinated and septum diseases, polypi, adenoids, enlarged tonsils, etc.

It will, therefore, be seen that notwithstanding the extreme simplicity of the questions, they are most comprehensive in their character, and are capable of detecting a vast majority of serious eye, ear, nose and throat diseases, and while the teacher cannot and should not attempt to make a diagnosis of the pupil's malady, he will at least know that something is wrong, and this is quite sufficient; the physician consulted will do the rest. In case some abnormal condition is disclosed by the tests, the teacher sends the parent a card of warning, stating that some disease is believed to exist, which is not only unfortunate for the child, but will retard the progress of education, and advising the parent to consult the family physician or some specialist, either at the office or free dispensary. It will thus be seen that there is absolutely no reason why an intelligent teacher should feel at all incompetent to make these tests, and it is earnestly hoped that this objection will be now relegated to obscurity.

(To be continued.)

AN UNFORTUNATE ERROR CORRECTED.

Through an error in transcribing, Dr. R. M. Bonar, of Santa Rosa, a graduate of the Ohio Medical University, Columbus, Ohio, is indicated in the new Register as a graduate of the Ohio Medical College, an eclectic institution. The Journal is advised that this has caused some trouble, and therefore takes pleasure in printing Dr. Bonar's letter; the statements made by him are found to be quite correct.-ED.

made by him are found to be quite correct.—E.D.

To the Editor of the State Journal:—Owing to a typographical error in the recent register I am being caused considerable annoyance. The data furnished you gave my school of graduation as Ohio Medical University; it appears in the register as Ohio Medical University; it appears in the register as Ohio Medical College, which is an eelectic school.

I have joined the County Society here as a regular, which I am, but the members have taken exception to my doing so. I have explained to them that it's only an error in the types, but do not wish my vindication to rest on my word alone, and I request you write a letter to the Secretary of the Sonoma County Medical Society confirming the above, if you find it to be true, and also an item in the next issue of the JOURNAL noting the correction would only be in justice to me. Very truly, R. M. BONAR.

DR. PHILIP MILLS JONES has been appointed the representative of California on the Auxiliary Legislative Committee of the A. M. A. to meet in Washington, D. C., Feb. 11.

VASECTOMY.*

AN ARGUMENT FOR ITS THERAPEUTIC USE IN CERTAIN MENTAL DISEASES AND AS A MEANS OF DIMINISHING CRIME AND THE NUMBER OF CRIMINALS.

By C. N. ELLINWOOD, M. D., San Francisco.

A MONG the many criminologists not a few of the most erudite, humane and progressive have advocated castration as an efficient and justifiable treatment for the insane and those of the criminal class who are given to persistent, violent and homicidal tendencies. The reasons generally adopted in advocacy of this important measure of human progress are:

I. The benefit or improvement in the mental condition of the afflicted individual; and,

2. The protection it affords to his fellows from violence and the jeopardy of life; and,

 The important protection it affords to mankind against the transmission by heredity of morbid and vicious elements of organization and tendencies which add so much to the world's misery and human disgrace.

My purpose in asking the attention of this Society of medical practitioners is to submit the question of a possibility of adopting the therapeutic procedure of vasectomy for the relief of a class of sufferers (imbeciles, maniacs and criminals), who, by heredity or environment, have acquired morbid sexual perversion of a chronic and dangerous kind. We see a few of them in our private practice and many of them in our eleemosynary and reformatory institutions. Some of the most horrible crimes of history have been committed by sexual perverts, in that state of maniacal eroticism or mental disease which abolishes reason and leaves only a bestial fury of insane impulses, to kill and mutilate their victims.

Many years ago a man came to me in great mental anguish, asking my services as a surgeon to castrate him. After patiently listening to his pitiable history. I sent him off with a diagnosis of insanity and referred him to specialists in that department of medicine. The following year he returned with the same request, yet more urgently expressed and in a more deplorable mental state, full of cogent reasons for the operation being performed. He felt at times, under excitement, violent impulses, which he feared would get beyond his control-an impending mania to kill and destroy, utterly repulsive and frightful to himself as he afterwards remembered them; a dangerous man in the community in which he lived. A year later he returned to me the third time, more determined and more insane and irresponsible than ever. The established teaching and practice of the profession, as well as public sentiment, denied this unfortunate the relief which he sought in castration and

which seemed reasonable enough; but only the asylum was left to him as a refuge.

Since that day we have learned something of vasectomy by many reported experiences, and while it is as efficient as castration in subduing sexual perversion and maniacal tendencies in the erotic subject, it is free from many of the objections which are usually advanced to the excision of the testes. The retention of the glands and some of their physiological functions is advantageous to the general health, personal ambition and social enjoyment. Vasectomy, in short, judging from recent experiences, is shown to be free from the dreaded after effects, mental depression and hypochondria which in the past (perhaps erroneously) were attributed to excision of the testes. The operation is less repulsive to the patient, is absolutely free from danger and leaves no mutilation nor visible scars, and within my observation but little atrophy of the testes.

In conclusion, I beg to report briefly the following case:

A boy at the age of puberty developed signs of mental disturbances, self-prostitution, violent temper, and maniacal tendencies under sexual excitement. Inability to learn in school, rebellious and refractory at home, and after several attempts to violently assault his sisters, he was placed in a reformatory institu-tion, where he was restrained and disciplined for several years without marked change in his condition. About two years ago he submitted to vasectomy as a rational therapeutic measure, with the most satisfactory result. His mother reports to me that his meatal faculties show great improvement, with ability for application and continuous concentration; entire relief from maniacal attacks of rage and destructiveness. His general health is good; he is quite industrious, ambitious to work and happy in following his trade, which he is mastering with fair progress.

Comparing his present condition with the pitiable and hopeless state he has been in for years prior to the operation, amply justifies the procedure, and encourages its adoption as a rule of practice in such cases. The patient himself realizes the benefit he has derived and warmly expresses his gratitude.

The practical results of vasectomy in this class of cases, have yet to be shown by a multitude of cases and an accumulation of observations, but enough has been shown to commend it to the attention of the profession, and especially to the medical staffs of public institutions where such unfortunate patients most do congregate.

DISCUSSION.

Dr. J. Rosenstirn, San Francisco—It is hard to judge from the one case reported by Dr. Ellinwood, whether such interference will always have such a most satisfactory result. We accept, perhaps, that there is an internal secretion from the organs of generation that has an irritant influence on the nervous system, and thereby produces these changes in character and mentality, as Dr. Ellinwood has described. I could see my way clear to the efficacy of that interference, but where there are anatomical lesions, anatomical changes in the central nervous system, I do not see exactly how vasectomy can change the character or disposition and the degeneracy of the patient. I believe Dr. Ellinwood

^{*} Read at the thirty-third annual meeting of the State Society, Santa Bartiara, April 21-23, 1903.

has to be congratulated upon the result of this singular and single case. Whether it can be recommended and accepted in cases of that kind, the future perhaps will detail. It is a most interesting case, and the result is excellent.

Dr. J. H. McBride, Pasadena-I think Dr. Ellinwood's position is one which ought to be considered entirely free from prejudice. Although I have found in talking with others that it is very difficult to consider. There are some facts that guide us somewhat in the value of this operation. Some years ago a man in Chicago was arrested for assaulting women on the This man recognized the fact that his passions were beyond his control and asked the physician to perform an operation. It did not affect him He was the same after it as before. operation destroyed the power of apperception, and after he had recovered from the effects of the operation and recognized this fact, he threatened to shoot I believe it is a fact, however, that the operation of ovariotomy has shown that the sexual desire is not destroyed in a large number of cases. It is well for us to consider that in this operation the power of apperception is destroyed, but it does not necessarily follow that the patient's passions are destroyed. If we do succeed in one point, we fail in the other.

Dr. R. L. Doig, San Diego—I had a case of this kind. A boy with the same disposition that these patients generally have, although as far as I know he had never attempted assault. The first I knew of him he was found after having castrated himself. He told me that he did it because he had been in the habit of self-abuse, and also that he was afraid of doing some damage. The boy was not particularly bright, but a thorough scholar and rather retiring in his habits. I saw the boy some eight years afterward and the depressing effect had not taken place. He was much better disposition and promised to be, while still retiring, more jovial and a better boy.

Dr. W. T. Lucas. Santa Maria—A few years ago a young man came to me requesting me to castrate He was a total stranger to me. I talked with him and he said he had been to see other doctors and they advised him to be castrated, which was false. He suffered from spinal irritation. Of course he was a masturbator and had been reading advertise ments until they had worked on his mind. He suffered from the spinal condition also. I put him on a treatment and tried to get a moral influence over him, but could not eradicate that idea from his mind that the only cure or salvation was castration. He went to another physician and told him that I had said he ought to be castrated and the doctor castrated him. I was called afterward on account of hemorrhage and he made a nice recovery from the castration with the relief of the spinal condition to a certain extent, and I think became of a great deal better disposition. I had a very serious time with him afterwards. He had not received the relief he wanted and threatened to kill the doctor, and I think he would have if the doctor had not left the town.

Dr. O. P. Paulding, Santa Maria—These are very interesting cases. I saw this case just reported myself. He came to me and I told him it would be necessary to operate on him, to do as he wanted. I afterwards heard that he had got this other doctor. He did have a most violent temperament afterwards and desired to kill the doctor and even to kill himself. Another man told me that he had bought strichnine and intended to kill himself. He had an uncle who took him east, and he came back a changed boy and is now the brightest young man in the village.

MEDICAL SOCIETY MEETINGS.

Alameda County.

The Alameda County Medical Association held its regular meeting Tuesday evening, January 12th, Dr. O. D. Hamlin in the chair. Forty members were present. Dr. Beckwith read a paper entitled "The Pathology and Treatment of Lobar Pneumonia."

The doctor reviewed the pathology of pneumonia taking up the various stages of the disease in detail and stating that autopsies show that the majority of fatal cases die during the transition stage between red and gray hepatization. He called attention to the appalling death rate of pneumonia at the present time, quoting statistics showing that it caused about 10 per cent. of all deaths. Under prognosis he emphasized the importance of the difference in virulency of the pneumococcus and thought that toxemia was the most common cause of death. Prophylaxis is not considered enough by the medical profession in general, and proper isolation of the patient and care of the sputum not carried out. He cited a case in which a young lady had contracted pneumonia by kissing her dying mother. The various methods of treatment were taken up, the doctor saying that, after all, while we may hold to one or another specific in which we may have confidence, yet the treatment of the symptoms as they arise forms the most important part in the successful handling of the disease. He thought that the best treatment today was with suprarenal extract. For the past two years he had used this drug with marked success. It should be given from the outset in doses of from one to six grains every two hours. The best results were obtained in children and those past middle age. course of the disease under the exhibition of the drug has almost always been shortened, the crisis usually occurring about the end of the third day. cases, however, especially in adults, the drug had no influence. In conjunction with the administration of the extract, the usual treatment for the disease was carried out, including sponging, strychnia, digitalis and whisky as indicated. Epinephrin hydrate seemed to be negative in its effect, and a change to the suprarenal extract has rendered positive results. The mode of action of the drug is rather problemati-It seems, however, to increase the number of leukocytes in the blood and to have the power of destroying toxic substances, either directly or by stimulating the system to manufacture antitoxin.

DISCUSSION.

Dr. Buteau thought that the indication in treating pneumonia was to use any measures, either in the shape of food or medication, which would tend to increase the number of leukocytes in the blood, as they seemed to play such an important part in the battle between the system and the pneumococcic poison.

Dr. Krone emphasized the importance of training the patient to exert a mental effort towards regulating the character of his own respirations, claiming that in this way it was possible to decrease the rate of respirations.

Dr. Crosby—I find that in the cases that I have treated with suprarenal extract that if I did not get a favorable action in three days I did not get it at all. In full doses the drug sometimes causes a rapid and irregular heart action and has to be stopped.

Dr. McCleave spoke of the use of ice to relieve pain and nervousness and to reduce fever. He thought that he obtained favorable action from the use of creosote carbonate given for its antitoxic effect.

Dr. Stratton-I think it possible to abort pneumonia in some instances, the necessities being a sthenic patient, an early diagnosis and a prompt institution of treatment. The indication is to bring the blood to the surface, and I use the diuretics and diaphuretics. such as liq. ammon. acitalis, dover's powder with quinine, or even the nuriate of pilocarpin hypodermatically.

Dr. Clark stated that he had had a much lower mortality in pneumonia of the aged at the county hospital during the past year since using suprarenal extract, than previously.

Dr. Pratt reviewed the various methods of treatment of this disease that he had seen lauded during the past forty years, and concluded by saying that there was no such thing as treating pneumonia by any one drug, but that the middle course was productive of the best result.

During executive session the following officers were elected to serve for the ensuing year: President, Dr. Jeremiah Maher; first vice-president, Dr. E. N. Ewer; second vice-president, Dr. J. M. Shannon; secretary, Dr. A. H. Pratt; treasurer, Dr. Chas. Dukes; Board of Censors-Drs. L. P. Adams, C. H. Miller and Dudley Smith. Delegates to the State convention—Drs. C. R. Krone, H. G. Thomas, A. H. Pratt, J. L. Milton and O. D. Hamlin

The following were elected to membership in the society: Dr. Lillian Shields, Dr. Anna Williams, Dr. J. B. Wood, Dr. W. L. Dunn, Dr. Carolyne Cole. A. H. PRATT, Secretary.

The California Academy of Medicine.

The California Academy of Medicine met in regular session January 26th, the president, Dr. Huntington, in the chair. Dr. Emmet Rixford presented a case of spasmodic torticollis; a case of result after extensive carcinoma of the neck; a case of Marjolin's ulcer. The particular interest in the carcinoma case was in the fact that the growth, which had been originally very considerable, was greatly reduced in size and almost disappeared after an attack of erysipelas. Dr. T. W. Huntington presented a patient upon whom he had operated. The child had suffered from osteomyelitis and most of the left tibia had been destroyed. Transplantation of the fibula had been performed and the boy now had a fairly useful leg, though as yet bony union at the lower end had not taken place. He also exhibited a specimen of gall bladder containing a stone which completely filled the viscus. The gall bladder with its contents had been removed together. Dr. Harry M. Sherman exhibited a specimen of paraffin which he had, with some difficulty, removed from the bladder of a young man. The patient had had congenital stricture resulting in a peculiar, and to him distressing, variety of stream when urinating, and he had thought to dilate the stricture by means of a home-made paraffin bougie. The result was quite what might have been expected. Dr. Chas. M. Cooper exhibited a specimen of aneurism of the aorta with a well-organized clot which practically cured the aneur-Had there not been pressure on the vagus and suppuration, the patient would doubtless have lived for a long time. He also demonstrated the German apparatus for producing large quantities of ultra violet rays from the high-frequency apparatus by means of short spark gaps. All of the papers and cases were discussed. The chair appointed the standing committees for the year and several names were presented for membership.

Mendocino County.

The annual meeting of the Medical Society of Mendocino County met January 16th, at the office of

Dr. Lathrop in Ukiah. Owing to the inclement weather and great distance at which some of the members live, the attendance was small.

On motion of Dr. Moore it was decided to postpone the election of officers and delegates to the coming meeting of the State Society to an adjourned meeting to be held April 2d, when it is hoped to have a better

The paper of the evening was read by Dr. Poage on "Infant Feeding," and was discussed by all present.

The secretary reported the enrollment of 20 members, including all but six of the regular eligible physicians of the county.

It was decided to give notice in the STATE JOURNAL at an early date of a proposed amendment to the by-laws fixing the date of the annual meeting at a more convenient season, so that more members from a distance may be able to attend, the date to be fixed C. A. POAGE, Secretary. at the next meeting.

Merced County.

The Merced County Medical Society held its regular monthly meeting January 7th. Dr. O'Brien being out of the city, the meeting was held in the office of Dr. Present: Drs. Rucker, Smith, De Loss and Lilley. Lilley.

The paper for the evening was prepared by Dr. W. A. Whitlock and read by Dr. Rucker, as Dr. Whitlock was unavoidably absent. The title of the paper was was unavoidably absent. The title of the paper was "Too Much Medicine," the author making the point that the majority of us prescribe far too much medicine, using several drugs where one would do. The reading of the paper was followed by quite a lengthy discussion, led by Dr. Smith taking the ground that the successful man today is he who pays most attention to diagnosis and less to medicine, and that antipyretic drugs did; as a rule, much more harm than good. Dr. Rucker and Dr. De Loss brought out these points more strongly, and stated that the longer they practiced the less medicine they used, relying more on other therapeutic measures for results.

Dr. Smith was invited to read a paper at our February meeting, subject to be selected.

Meeting adjourned to February 4th, at 8 p. m.

W. E. LILLEY, Secretary.

Orange County.

The Orange County Medical Society met in regular session Tuesday evening, January 5th. Owing to the disagreeable weather the attendance was light. Those present, however, had a very interesting meet-

After the usual routine business, Dr. Gordon reported a case of nephritis following a vaginal hysterectomy, emphasizing the necessity of a thorough analysis of the urine before administering an anesthetic. In this case the urine did not show a trace of albumin with heat and nitric acid, but the same sample after the operation showed about 1 per cent. with Esbach's

Dr. Bruner then read the paper of the evening, his subject being "Fractures of the Forearm and Hand." The paper was ably prepared and showed evidence of a thorough knowledge of the subject. In the dressing of a Colles' fracture, Dr. Bruner advo-cated that used by Dr. Bodine in the Long Island City Hospital, and gave a practical demonstration of its H. S. GORDON, Secretary. application.

San Benito County.

(Organized January 22, 1904.)

A meeting of the physicians of San Benito county was called by the Trustees, through Dr. Philip Mills Jones, for the purpose of organizing a county medical society, on the night of January 22nd. In response to the invitations sent out, Drs. Nash, O'Bannon, O'Donnell, Porter and Tebbetts attended the meeting, and Drs. Ball and Hull sent word that while they could not come, they were heartily in sympathy and wished their names enrolled. Dr. Tebbetts reported that Dr. Flint, of San Juan, a permanent member of the State Society, would join in the county organization, so his name was also enrolled. After explaining the system and purposes of organization, Dr. Jones called the meeting to order and Dr. Tebbetts was elected temporary chairman. The constitution and by-laws recommended by the State Society was then read by Dr. Jones, and on motion the San Benito County Medical Society was organized and the constitution and by-laws adopted as read. On motion it was decided that the society should meet on the first Monday of each month, at 8 p. m., the place of meeting to be determined from month to month. On motion the roster was left open for sixty days in order that all who desired might come in as charter (There are but two eligible physicians in members. the county whose names were not enrolled at this meeting.) Election of officers to serve until December, 1904, was then the next order of business, and this resulted in the choice of Dr. James H. Tebbetts, president; Dr. Richard W. O'Bannon, vice-president; Dr. Joseph M. O'Donnell, secretary; Dr. Leonard C. Hull, treasurer, and Drs. Nash, Ball and Porter, censors, for one, two and three years respectively. election of delegate and alternate was laid over until the March meeting. The annual dues were fixed at \$2.00.

Thus another county society is added to the list, and the year 1904 started well on its way. The Trustees hope that it will see quite as energetic organization as has the past year. The newest society, while it is not large in numbers, is strong in that it represents all but one of the eligible physicians who are in active practice. The feeling of strength in organization is well developed in the new society and there is every evidence that it will live a long and useful life. The Trustees wish it godspeed.

San Francisco County.

The regular monthly meeting of the San Francisco County Medical Society was held on the evening of January 12th, President J. Rosenstirn in the chair.

The papers read were on the subject of radiotherapy, and were as follows: "X-ray in the Treat-ment of Epithelioma," by Dr. D. W. Montgomery; "The Finsen Ray," with an exhibition of lamp, by Dr. D. Friedlander; "Radium, with a Demonstration of Its Influence on Plants," by Dr. D. A. Stapler. Dr. Howard Morrow was on the program for a paper on "The Theory, Indications and Statistics of the Finsen Ray," but was unable to be present.

DISCUSSION.

(Abstracted from the Stenographer's Notes by Dr. A. B. Grosse.)

Dr. A. B. Grosse—The papers read this evening have been so exhaustive that it is practically impossible to add anything of importance. I would like to congratulate Dr. Montgomery upon his good results with the X-ray, i. e., the non-occurrence of burn or dermatitis; for it is only the fear and the not infrequent occurrence of these symptoms that have and will limit, somewhat, the use of the X-ray, as a routine treatment, in epithelioma. The

superficial epitheliomata are usually slow of growth and, during their early development, only slightly malignant, and have been cured, or eradicated, by various methods: (a) Internal administration of arsenic. (Lassar). (b) By freezing with ethyl chloride. (c) By caustic pastessenic and chromic acid. (d) Currettement. (e) Cuttery; actual cautery, hot air, paquelin. (f) Excision, which is, by fat the simplest, most inhiversal and, in most cases. The simplest is most inhiversal and, in most cases. The simplest is most inhiversal and, in most cases, cinomata, should be treated by X- or a longer or shorter period, has occasionally been arrived at; i.e., the case still remains inoperable, but the cachexia disappears and the patient gains in weight. Dr. Montgomery states that this is, at best, a tedious treatment, that for some weeks you can't tell whether you will have any result, disagreeable or otherwise. Hence, the routine treatment by X-ray is to be discouraged, as valuable time may be lost and disagreeable results follow. For certain selected cases, where the knife is objected to, and in locations where cosmetic effect is most desirable, as in choice, but only to the hard of thiedered the method of choice, but only to be hard of the development of the content of the content

forgotten all about my calculus, a very violent dermatitis coccurred.

Dr. J. Henry Barbat—I fell heir to Dr. Jones' iupus case, and it might be interesting to note that this patient with lupus has to have a treatment every little while to destroy new foci. A point I wish to make is that the effect of the X-ray is, to a certain extent, only temporary. We must not expect every case of lupus, or epithelioma, which has been completely eradicated, is going to stay cured. I have lately had a case where I cleaned up a large epitheliomatous patch. After the man had been away several months, he came back with a small growth at the external cauthus. This growth has, at present, completely demolished the eyeball and destroyed the orbital plate of the frontal bone. Exposure to the X-ray simply seemed to increase the rapidity of the growth. I advocate the treatment in almost all skin diseases, still the effects are only temporary and you can say what you like about the cures, there will be a certain number of recurrences.

Dr. Garceau—For the last two years I have spent my time in Germany, France and England, investigating, as

much as possible, our present experimental results in radial therapy. I must say that I am convinced that in it we have the best and most approved scientific treatment for the treatment of the skin. The last few remarks made by Dr. Jones, in the use of the X-ray, I approve of. I think there is no danger in the use of the X-ray if properly handled under proper technic. In London I never saw one single accident in the treatment of the skin, but many beautiful results. I would like to say that, in the treatment of lupus, I have seen nothing to take the place of the original Finsen lamp, where we get the largest amount of ray and where the most beautiful result is obtained. In England I think they have a preference for the use of the X-ray, In skin diseases these instruments are valuable. In alopecin areata I can see no indication for its use, considering the disease of neuroticorigin. In the treatment of lupus erythematosus I should consider it scientific treatment. In the treatment of acne I think other methods are just as good.

Dr. McDonald—It seems to me that the X-ray, in a great many cases, has done a great deal more harm than good. I have noticed, in those cases which have been treated with the X-ray, that epithelioma of the lip does not diminish in size, but that the superficial or upper portion first affected sloughs, that the necrosis in the periphery is more rapid and that, whereas an epithelioma may take a long while to spread, in three cases, with the use of the ray, I have seen it take a very rapid course in three months reaching down to the end of the lip. In one case, in which I removed the whole of the lip, there was no infection of the cut edges. About three months afterward, nodules appeared below the jaw and then we treated with the X-ray. This case was most faithfully treated. My experience here was that it did destroy the growth in the center, but the growth at the periphery was very rapid. Another thing, unless you made an incision, the patient's temperature would go up and show all the symp

right in epithelloma of the face. It seems to me that K-xay does take action on the sweat glands. In the ordinary epithelloma of the lip and face it does more harm than good.

Dr. Himmelsbach—I think Dr. Finsen got his idea, principally, from a professor in the Medical College at Copenhagen, in 1852, who discovered that a number of persons were not pitted by smallpox, when not exposed to light. I would say he made experiments with worms and had part of the box covered with red glass and part with blue glass and noticed that the worms crept from the blue glass and noticed that the worms crept from the blue glass and noticed that the worms crept from the blue glass to the red. In the recent statistics, Finsen makes no such claims as the gentlemen who entered into discussion tonight, that is as to the number of cures. Finsen's work has been only experimental. I know of a lady who went there from here and she says that the pressure is so painful that she could not stand it. I have heard of the use of the Finsen ray for deep-seated structures. It would be impossible to use that here.

Dr. D'Arcy Power—The limits, in the application of this treatment, have recently been dwelt upon by Dr. Bevin of Chicago. Some of his didactics are worth consideration. He dwelt on the question as to what is the limit in carcinomatous growth. He points out that the total depth is only about 1 c. m. at which you may penetrate. He brings up the question as to whether we can deal with those deeper forms and what will be our future in dealing with them. That brings up the question to which Dr. Jones referred. Those which are most unstable are most readily affected by the X-ray. Bevin proposes to lower the vitality of the already changed tissue so that the X-ray may deal with them at greater depth. He has done this along the line of drugs—lodit's and mercury—and by cutting off the blood supply to the tissue which he wants affected. It is a logical and scientific idea that we lower the vitality of the diseased tissue that the X-ray may do be

may do better work.

Dr. Stapler—I would like to say a few words in regard to Bevin's idea. He proposed to ligate vessels, in order that the X-ray may penetrate deeper into the tissue. I would say that ligation was proposed by many to cure carcinoma of the uterus or check the growth. If there are some cases treated in this manner by ligation, we cannot say that it was due to the deeper entrance of the X-ray. On the other hand, the X-ray does not act upon the tissue, not as tissue itself, but mostly upon the arteries. The changes in the arteries are most marked.

Dr. Friedlander—With regard to this machine, which

Dr. Friedlander—With regard to this machine, which I have shown you here, Dr. Grosse said that you would have to treat only a small area at a time, but it can be adjusted so as to treat larger areas. As a matter of fact, the Finsen lamp covers a smaller area than this. As to the treatment of lupus with this machine, I have had only one case of lupus, but the improvement was good. If the Finsen is not properly applied, it is equally dangerous.

Dr. Montgomery—As far as disagreeable results from X-ray are concerned, every person has disagreeable results. In speaking of epithelioma of the lip, it is acknowledged that epithelioma of the lip is likely to give you trouble. I have one patient who has been a great deal benefited, and one case I believed to be cured, because it held back for so long, but which has now increased again. As regards the temporary results from this treatment, as stated by Dr. Barbat, we might say that of everything we do. We postpone the evil day. I have refused to treat epithelioma of the deeper organs, until a patient came to me some time ago who had epithelioma of the breast, and I sent her to the surgeon to be operated upon. It recurred in the scar and when the woman came back she had little nodules under the skin that looked like a developing cancer. It was the most remarkable extension of epithelioma I have seen. Dr. A., who saw her, thought it might be streptococcus infection. Its course since then has proved it not to be epithelioma. That went down with rapidity, under the X-ray. These cases are often quite amenable to the X-ray. As regards the technic, a person ought always to be at it in order to do well. This is, practically, the only experience I have had. As regards the Finsen light, I have not had very much success with it. It does not seem to me nearly so powerful as the X-ray in the cure of diseases. It is a good stimulant. That is a very desirable thing in some cases. In lupus erythematosus, I have succeeded in ameliorating the disease and almost causing it to disappear. Whether that was due to the menopause coming, or whether it was due to the light, I do not know. In another case, I could not get any result from it. With regard to radium, I have had no experience at all. I know that it is extremely violent and will cause burns, not only where you want them, but at quite a distance. I may mention, tonight, the name of a man who used radiotherapy first in the world, and that was Dr. Thayer. He reported on this sub

Several names were proposed for membership, and applications referred to the committee.

Dr. Henry Gibbons announced to the society that as the Trustees had not qualified in the prescribed time under the constitution, the offices were vacant. On motion the Trustees chosen at the annual election

were again placed in nomination and duly elected.

Dr. W. I. Terry, librarian, reported that more commodious quarters had been secured on the floor above the rooms at present occupied. The library committee was empowered to purchase carpets, etc., for the new rooms.

A communication was read from the Merchants' Association, thanking the society for its recent action with reference to the site for the new City and County Hospital.

Santa Barbara County.

The regular monthly meeting of the Santa Barbara County Medical Society was held in the parlor of

the Arlington Hotel, January 13, 1904.

The meeting was called to order at 8 p. m., by the president, Dr. Charles Anderson, and the following members answered to roll call: Drs. Charles Ander-Blake, Cunnane, Stoddard, Vaughan, son, Conrad, Newman; visitors, Dr. W. T. Barry. The minutes of the previous meeting were read and approved.

The board of censors having reported favorably upon the application of Dr. W. T. Barry, he was duly elected to membership.

The secretary's report on the death of Dr. R. M. Evarts was received, and on motion was adopted by the society.

R. M. Evarts, M. D. An esteemed member of the Santa Barbara County Medical Society, died October 2, 1903, after a short illness. His last illness was caused by an injury produced by being thrown from his carriage into an open ditch while driving late at night through an unlighted street. Born in Leon, N. Y., August 27, 1859, and educated in a private school of his native village, he early in life determined to study medicine. His first medical instruction was received in the old Medical College of Buffalo, and he later graduated from the Medical Department of the Howard University of Washington, D. C., December, 1882. The year following graduation he practiced his profession in Dayton, N. Y., from whence he re-

moved to Irving, N. Y., where he remained in active practice for nine (9) years, giving special attention to electrotherapeutics. In 1884 he was happliy married to Miss Anne Tully of Washington, D. C., and as a result of this union, he leaves a widow and three charming daughters to mourn his loss. His wife's health failing, he was constrained to give up a lucrative practice and take up his residence on the sun-kissed shores of the placid Pacific.

Be it Resolved, That it is with profound regret that we record the sudden and untimely death of our late colleague and fellow-member. Possessing a genial and generous disposition, he endeared himself to the members of the association and to a large circle of friends. Though with us but a short time, he gave promise by his earnestness of purpose and faithful regard for duty, of becoming one of the association, we extend to the Dereaved family of the deceased assurances of the inexpressible depth of its sorrow and sympathy in their affliction. We furthermore order that these resolutions be incorporated in the minutes of the association, and a copy thereof be transmitted to his family.

The nomination of officers for the ensuing year

The nomination of officers for the ensuing year being in order, the following names were placed before the society, and on motion made and carried, that the secretary cast the ballot, were elected: President, Charles Anderson; vice-president, C. E. Vaughan; secretary, W. B. Cunnane; treasurer, W. H. Flint.

The paper of the evening, "Acute Gastroenteritis," was read by Dr. Charles Anderson. The author's unique experience in the Philippines and on the Rio Grande made it of unusual interest. The discussion that followed was both lively and entertaining.

After discussing a delectable lunch, the association adjourned.

W. B. CUNNANE, Secretary.

Santa Clara County.

The regular monthly meeting of the Santa Clara County Medical Society was held on the evening of January 20th.

Under "new business" the society voted an appropriation of fifty dollars to the State Board of Examiners as its contribution toward legal expenses incurred in defending the State medical law and prosecuting illegal practitioners.

J. LAMBERT ASAY, Secretary.

Sonoma County.

The Sonoma County Medical Society met on the 14th of January, at Santa Rosa, with a full attendance.

Dr. J. W. Jesse, president, outlined the work proposed for the year.

The paper of the evening was read by Dr. R. A. Forrest, and the discussion on the subject of "Emo-tions in the Treatment of Disease" was carried on

by many of those present.

Dr. E. J. Ruddock of Guerneville was elected to membership.

Adjourned at 12 midnight. G. W. MALLORY. Secretary.

Tri-County.

(Santa Cruz, Monterey, San Benito.)

The Tri-county Medical Society met at Hollister, January 5th, at 7:30 p. m.

The annual election resulted in the choice of the following named: Dr. P. K. Watters, Watsonville, president; Drs. L. C. Hull, Hollister, E. E. Briggs (H.), Watsonville, S. B. Gordon, Salinas, W. A. Phil-lips, Santa Cruz, vice-presidents; Dr. Saxton T. Pope,

Watsonville, secretary and treasurer.

Dr. P. K. Watters read a paper before the society entitled, "A Brief Synopsis of the Etiology, Symptomotology, Pathology and Treatment of Appendicitis."

The subject was discussed by Drs. C. E. Beebe, E.

E. Briggs, W. R. O'Bannon, J. M. O'Donnell, J. H. Tebbetts and S. T. Pope.

The annual dues were collected.

It was decided to hold the next meeting at Santa Cruz, March 7th, in conjunction with the Santa Cruz County Society. SAXTON T. POPE. Secretary.

BY-LAWS.

(Proposed Constitution and By-Laws of the State Society, continued from page 34, January JOURNAL.)

ARTICLE VI.

COMMITTEES.

SECTION 1. The following standing committees shall be appointed annually: 1, Arrangements; 2, Memorial; 3, Medicine and Therapeutics; 4, Surgery and Anatomy; 5, Obstetrics; 6, Gynecology; 7, Peand Anatomy; 5, Obstetrics; 6, Gynecology; 7, Pediatrics; 8, Eye; 9, Ear, Nose and Throat; 10, Genito-Urinary Diseases; 11, Cutaneous Diseases; 12, Nervous and Mental Diseases; 13, Hygiene, Sanitation and Climatology; 14, Pathology and Bacteriology; 15, Chemistry and Physiology; 16, Medical Legislation and Education; 17, Scientific Program.

SEC. 2. The Committee on Arrangements shall consist of five members, the Chairman of which shall be a member of an affiliated society (if there be such) of the county in which the next annual meeting of this Society is to be held. Its duties shall be to perfect the program and make all necessary arrangements for the annual meeting for

which it is appointed.

SEC. 3. The Memorial Committee shall consist of three members. Its duties shall be to present a "Memorium" upon those members who have died during the current year.

SEC. 4. The Committee on Scientific Program shall consist of five members. Its duties shall be to arrange the program of reports of scientific standing committees, with discretionary power to select and arrange voluntary papers and discussion thereon, and to furnish a copy of such program to the Committee on Arrangements at least fifteen days prior to date of annual meeting.

SEC. 5. The remaining standing committees shall be designated "Scientific Committees," and shall each consist of five members. They shall report to the Society by contributing papers or other scientific matter germane to their respective subjects.

SEC. 6. The Chairman of each Scientific Committee shall send to the Committee on Scientific Program the names of authors and titles of all papers and reports to be presented from his section at least thirty days before the date of the annual meeting. The papers or reports to be read, or a copy thereof, shall be placed in the hands of the Committee on Scientific Program at least thirty days prior to date of annual meeting.

SEC. 7. No paper, address or report presented before the general meeting, except the address of the President, shall occupy more than twenty minutes. In discussion, no member shall be allowed to occupy more than five minutes, except by consent.

ARTICLE VII.

ORDER OF BUSINESS.

SECTION 1.—General Meeting.

- Calling to order.
- Address of Welcome. Address by President.
- Reading and discussion of papers and reports of Standing Committees
- 5. Reading and adoption of minutes.
- Adjournment.
- SEC. 2.—House of Delegates.
- 1. Calling to order.

- 2. Roll call.
- 3. Report of President.
- 1. Report of Secretary.
- 5. Report of Council.
 6. Report of Editor.
 - 7. Report of Treasurer.
 - 8. Report of Standing Committees.
 - 9. Report of Special Committees.
 - 10. Unfinished Business.
 - 11. New Business.
 - 12. Selection of place of meeting.
- 13. Election of Officers and Delegates.
- 14. Reading and adoption of minutes before adjournment of each session.
- 15. Adjournment.

. Sec. 3. The above Order of Business of either Branch of this Society shall be subject to temporary change or suspension by a majority vote of all members present, except the selection of the next place of meeting and the election of Officers and Delegates, as provided in Article VI, Section 2, of the Constitution.

ARTICLE VIII.

COUNTY SOCIETIES.

SECTION 1. All component county societies of this Society or those which may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Society.

Society.

SEC. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

SEC. 3. Charters shall be issued only upon approval of the Council or House of Delegates and shall be signed by the President and Secretary of this Society. The Council or the House of Delegates shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

SEC. 4. Only one component medical society shall

be chartered in any county.

SEC. 5. Each county society shall judge of the qualification of its own members, but, as such societies are the only portals to this Society and to the American Medical Association, every reputable and legally registered physician who does not practice or claim to practice, nor lend his support to, any exclusive system of medicine, shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

Sec. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and

its decision shall be final.

SEC. 7. In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a Board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

SEC. 8. When a member in good standing in a component society moves to another county in this State, his name, on request, shall be transferred, without cost, to the roster of the county society into

whose jurisdiction he moves.

Sec. 9. A physician living on or near a county

line may hold his membership in that county most convenient for him to attend.

Sec. 10. At some meeting in advance of the Annual Session of this Society, each county society shall elect a delegate or delegates, and an alternate or alternates, to represent it in the House of Delegates of this Society, in the proportion of one delegate to each twenty-flye members or major fraction thereof, and the Secretary of the society shall send a list of such delegates to the Secretary of this Society, at least two weeks before the Annual Sessions.

SEC. 11. The Secretary of each component society shall keep a roster of its members and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Sec. 12. The Secretary of each component soclety shall forward its assessment, together with its roster of officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary of this Society each year thirty days before the Annual Session. It shall be the duty of the Secretary of this Society to notify all secretaries of component societies, of this requirement, not later than the 15th of March, each year.

Sec. 13. Any county society which fails to pay its assessment or make the report required, on or before April 1st, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Society or of the House of Delegates until

such requirements have been met.

SEC. 14. In counties where it is not practicable to organize a County Medical Society, any member of the profession in said county may have the privilege of uniting with the Society of an adjoining county, but such membership shall continue only during the time that no organized County Medical Society exists in that county. If, however, it is more convenient for a physician who lives in one county to attend the meetings of an adjoining component society, he may continue as or become a member of such Society.

Sec. 15. Any component society having its privileges suspended for two successive years shall be dropped from the list of component societies.

Sec. 16. If any County Medical Society shall refuse to pay its annual assessment, or to investigate a charge against any member, or to discipline such member if found guilty, or commit any act which may be derogatory to the honor of the medical profession, such society may have all its rights and privileges suspended, on a two-thirds vote of the Council, or of the House of Delegates.

Sec. 17. No member of a component society shall be deprived of his membership unless by his own act, except by a three-fourths affirmative vote of all members present at a regular meeting, and after an opportunity has been given for the accused to be heard in his own defense; but a member shall be dropped on the revocation of his certificate by the Board of Medical Examiners of the State of California.

SEC. 18. No member shall be permitted to resign while he owes dues, or while he is under charges. Any member of a component society who is censured, suspended or expelled, shall have the right

to appeal to the Council of this Society. This appeal must be made within three months from date of the act of censure, suspension or expulsion. The decision of the Council shall be reported to the House of Delegates of the State Society at its next annual meeting for final adjudication.

Sec. 19. When a member shall resign his membership in a component society, he shall thereby forfeit all right and title to any share in the privileges and property of the Medical Society of the State of California, or its subordinate divisions.

ARTICLE VIII.

NOTICES OF DEATH.

Section 1. On the death of any member, the Secretary of the Society to which he belonged shall send notice of his death, also biographical data, to the Chairman of the Memorial Committee of the State Society, and to the Editor.

ARTICLE IX.

SEALS.

SECTION 1. The Seal of this Society shall be of the same size and design as the Seal of the State of California. The marginal inscription shall have in the upper segment, "The Medical Society of the State of California"; in the lower segment, "1856 and 1902."

It shall be in the custody of the Secretary of this Society and shall be affixed to all papers emanating from the Medical Society of the State of California.

ARTICLE X:

MISCELLANEOUS.

SECTION 1. All papers read before the Society or any of the Sections shall become its property. Each paper shall be deposited with the Secretary when

SEC. 2. The deliberations of this Society shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this Constitution and By-Laws.

SEC. 3. The Principles of Medical Ethics of the American Medical Association are recommended in the conduct of members in their relations to each other and to the public.

olievande, A ARTICLE XI.

AMENDMENT TO BY-LAWS.

Section 1. The House of Delegates is authorized to amend any Article or Section of the By-Laws by a three-fourths affirmative vote of the delegates present, provided that such amendment has been submitted in writing and laid on the table for twenty-four hours previous to being voted upon.

Sec. 2. The Constitution and By-Laws heretofore

SEC. 2. The Constitution and By-Laws heretofore governing this Society are hereby repealed, and this Constitution and By-Laws shall be in full force and effect immediately after it is declared duly adopted. All the officers elected at this session, to serve under the new Constitution and By-Laws, shall be such as are required by this new Constitution and By-Laws, and shall be considered duly elected.

(The following is suggested as a substitute for Article VI, as printed above, and is practically the arrangement of committees as set forth in the by-laws recommended by the A. M. A. This arrangement will greatly simplify and bring up to date the manner of preparing a program for a meeting; its success or failure would be determined by the personnel of the first two commit-

tees on Scientific Work. If the right men are placed on that committee for the first two years, the result would probably be a decided improvement on the present arrangement of having a number of minor committees.)

ARTICLE VI.-COMMITTEES.

SECTION 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Arrangement, and such other committees as may be necessary. Such committees shall be elected by the House of Delegates, unless otherwise provided.

Sec. 2. The Committee on Scientific Work shall consist of five members, of which the Secretary shall be one, and shall determine the character and scope of the scientific proceedings of the Society for each session, subject to the instructions of the House of Delegates. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented.

Sec. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Society in securing and enforcing legislation in the interest of public health and of scientific medicine.

Sec. 4. The Committee on Arrangements shall consist of three members appointed by the component society of the county in which this Society is to meet, if there be such component society, or by the House of Delegates or the Council if no component society exists in the county where the Society is to meet. It shall provide suitable accommodations for the meeting places of the Society and of the House of Delegates, and of their respective committees, and shall have general charge of all the arrangements. Its Chairman shall report an outline of the arrangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

AN UNPLEASANT TASK.

It is not always, nor even often, pleasant to run counter to the wishes of a number of people and of one's professional brethren. Perhaps that is why many people who know what they should do, do not do it. It is a pleasure to learn of a city health officer who enforces the law even when opposed by friends and professional associates. Dr. Steinwand, of Selma, recently decided that there should be no public funeral of a child that had died of "croup," on the ground that it was a case of diphtheria, and hence a contagious disease, and a public funeral would endanger the health of the community. He stuck to his point in spite of much newspaper and general abuse, so we are advised, and enforced the law. The Journal congratulates him.

Mortality Statistics.—From statistics compiled by the Journal of the A. M. A. it appears that during 1903 the number of deaths of physicians in the United States and Canada was 1648, probably within 5 per cent. of the total mortality in the medical profession in North America. It is estimated that the number of physicians in this country is about 120,000.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PHARMACY.

SYNONYMS.

"Things which are equal to the same thing, are equal to each other."-Axiom No. 1, p. 19 Davies

Legendre, Edition 1860.
Few physicians know that many of the "new remedies" marketed under fanciful trade names are identical with remedies having dissimilar names, or are old preparations which have been given fancy names in order to create a false market for the thing in question. For the benefit of physicians and pharmacists the following table has been compiled and will be added to as the requisite information is obtained. The information is secured from chemists and from medical and pharmaceutical journals, and is correct in the main. Should any errors creep in they will be corrected as soon as detected. Until sufficient evidence to the contrary is forthcoming, it must be assumed that there is no question of substitution involved when the pharmacist supplies

a given article under any one of its	synonymous names.
upan of the Society for expli	Anasalpin Malan add to
Adeps lane hydrosus	Lanolin toolous and ares
previous to each Annual But	Lanum rest solepoled
salognomes markons a sussi	Argentum Crede
Argentum Colloidale	Collargol
	Colloidal silver
annutt all the not beautiful thereas	Benzo-naphthol
	Benzoyl-beta-naphthol
	(Betol server has took
Beta-naphthol Salicylate	Naphtalol
	Naphthosalol
	Salinaptol
	Asepsin
	Airolana and la elatain
Bismuth-iodo-subgallate	Airogen
Bismuth-loud-sungariate	Airoform
Detained Saturday Library	V. Sand Millians and Co.
Calcium beta-naphthol sul-	Abrastol
phonate	(Asaprol
Dimethyl - ethyl - carbinol	(Dormiol
chioral	Amylene-chloral
EH SHOOMSONIAN SUN IN	Aristol
outline of the strangements	Annidalin
Dithymol Diiodid	Di Thymol Iodid
brentymot briodia	Di Iodo Dithymol
	(And several other simi
	(lar names.)
	Antidolorin
Ethyl chlorid	Ethylol
with all billioned restaurance	(Mono-chlor-ethane
Hexamethylene-tetramine	Aminoform
	Ammonio-formaldehyde
	Cystogen
	Formin
	Saliformin
burley or shippening, at	Urotropin
", anhydromethylen citrate	Helmitol
Ortho - ethoxy - ana - mono -	(*Benzanalgene
benzoyl-amido-chinolin	*Analgen
	(*Quinalgen

Phenyl-dimethyl-parazolon.. (Germ. Pharm.)

dried add Jess Account foods et vite

Paraphenetin carbamid

Formin
Saliformin
Urotropin
Helmitol
*Benzanalgene
*Analgen
*Quinalgen
Dulcin
Sucrol
Analgesin
Anodynin
Antipyrin
Dimethyloxy-quinizin
Methozan
Phenazon (B. P.)
Phenylon
Pyrazin
Pyrazolin
Parodyn
Salazolon
Sedatin

Phenylacetamide	Acetanilid Antifebrin (And several hundreds of trade names for headache powders, etc.)
Phenylmethyl-ketone	Acetophenone Hypnone
Plant pepsin	Papain Papoid Papayotin Caroid
Salicylic acid ester of qui-	Salochinin Saloquinin
Salicylate of Salochinin	Rheumatin
Sodium sulpho-caffeate	Nasrol Symphoral
Thyroid gland, dried lactose trituration	Iodothyrine Thyroidin
Trioxymethylen	Paraformaldehyde Paraform

Triformol

Acetyl-salicylic acid = Aspirin Aluminum aceto-tartrate = Alsol Australian oli Eucalyptus = Flucol Bismuth chrysophanat = Dermol Bismuth phosphate (soluble) = Bisol Bismuth chrysophanat = Dermol
Bismuth phosphate (soluble) = Bisol
Bismuth pyrogallate = Helcosol
Bismuth subgallate = Dermatol
Bismuth beta-naptholate = Orphal
Calcium permanganate = Acerdol
Calcium permanganate = Acerdol
Calcium salicylate = Colchicin
Catarin hydrochlorid = Stypticin
Chloreton, 1 % solution = Aneson
Creosote carbonat = Creosotal
Diethylen-diamin = Piperazin
Gualacol carbonate = Duotal
Magnesium dioxid = Biogen
Oxyquinaseptol = Diaphtherin
Phenyl-ethyl urethan = Euphorin
Saccharin = Garanotose
Subgallate of bismuth = Dermatol
Sodium chlorate = Oxychlorine
Sodium beta-naptholate = Microcidin
Tang-Kui, Fl. extract = Eumenol
Trichloracetic acid, 50% solution = Acetocaustic
*Must be very cautiously used, if at all, for the p

*Must be very cautiously used, if at all, for the physiologic action is not fully known, and this chemical is said to have very serious effect upon the heart and nervous system.

Infant Mortality in France-P. Budin in his report to the Commission de Depopulation on infant mortality gives statistics which are summarized in the British Medical Journal. In Paris 145 out of every 1000 deaths are of children under a year old, and in St. Pol-sur-Mer the proportion is as high as 509 per 1000. During the years 1896-1900 the average annual mortality of children under one year in France was 134,434; in fact, the proportion of death to survivors of the same age was higher for the first year than for any other year below the 91st. The three most important diseases are infantile diarrhea, respiratory diseases and congenital debility. Of these, infantile diarrhea accounts for far the greatest number of deaths. Out of every 1000 infants dying in Paris, 380 die from diarrhea, in Rouen 510, in Dijon 584, in Troyes 682. The system of feeding is the most important factor in this result. Of 69 children dying of diarrhea at Boulogne, 8 only were breast-fed children, 20 were bottle-fed and to 41 solid food had been prematurely given. -Science.